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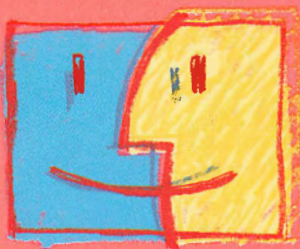
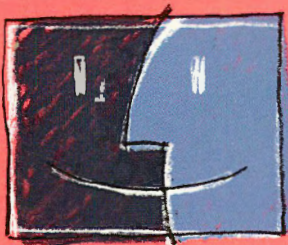
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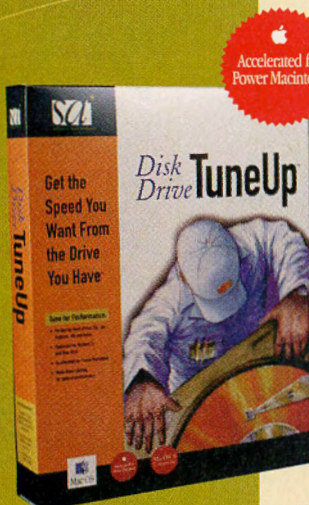
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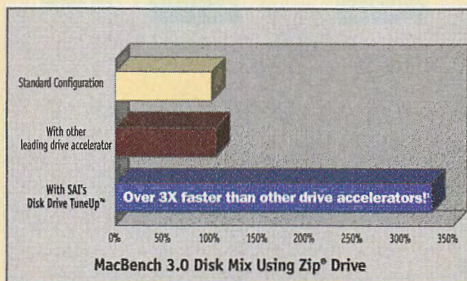
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1 Ziff Davis, MacBench® 3.0 scores using an Iomega® Zip® drive on an Apple Macintosh Performa 6400/180 running Mac OS 8.0 with 24 MB RAM and VM on. All products used in this test were shipping versions available to the general public. This test and its results were not verified by Ziff Davis. Individual gains depend on the type of media used, caching parameters established and system specifics.

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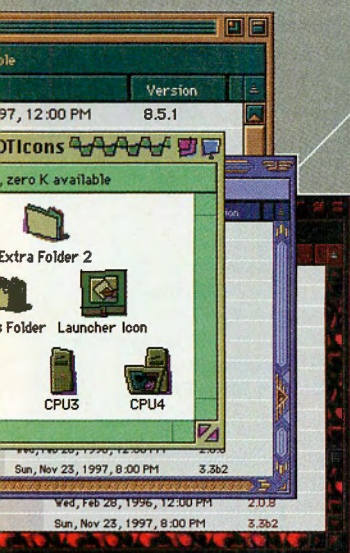
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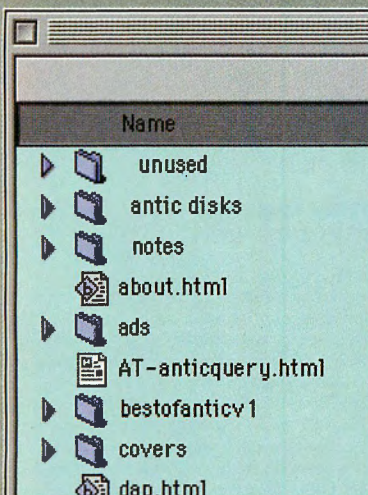
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It took more than a hair dryer to make Office 98 palatable, but artist Lloyd Dangle did the trick.



This is the hippest Mac scheme of them all, daddy-o!



Look, mom—no lines! And we didn't use a wrinkle cream, either.

APRIL 1998

highlights

26 The Microsoft Office Makeover

From worst to first, Microsoft has rebuilt Office 98 for the Macintosh from the ground up. See why Office 98 won't be like Office 4.2. **BY NIKKI ECHLER.**

32 When Worlds Kaleidoscope

Plot your own crazy schemes using our boffo guide. We walk you through the ins and outs of one of the most popular utilities ever made and show you how to get a new view onto your Mac's desktop. **BY MARK SIMMONS**

38 Seven Killer Customizations

Scroll without clicking? You must be mad. Get rid of those annoying lines and shaded columns in Mac OS 8's list view? No way! Way. We look at seven great utilities that may change the way you use your Mac—for the better. **BY KEVIN M. SAVETZ**

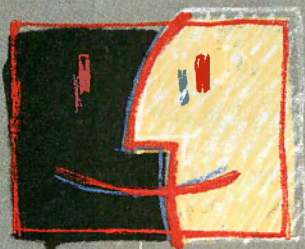
how to

70 Publicize Your Web Site

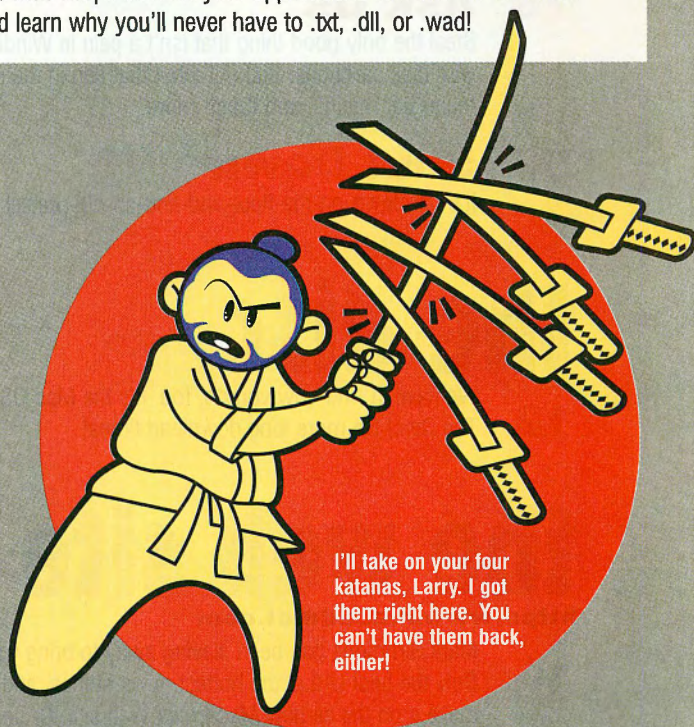
Take command of Web-crawling robots to get the most out of search engines.

74 Know It All About Type and Creator Codes

We dish up the dirt on how the Mac keeps track of your applications and their documents. Keep your desktop healthy, and learn why you'll never have to .txt, .dll, or .wad!



With some inspiration from Andy Warhol, artist Adam Vanderhoof puts a new face on the Mac OS.



I'll take on your four katanas, Larry. I got them right here. You can't have them back, either!

You can bet this car
won't be doing ads
for Chevron.



every month

6 Editor's Note

Same old magazine; new, slightly grizzled editor.

10 Letters

Yes, it was a great movie—thanks for saying so. Find out about the thrills of deleting large files, and tell Rob to call home.

18 Get Info

Apple's reversal of fortune—a profit! Plus, a peek at new Rhapsody software, a side-by-side comparison of underwear and disk formats, and a chance to win the Kaleidoscope Scheme Archive.

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76 Ask Us

Steal the only good thing that isn't a pain in Windows, resolve problems with disk partitions, find out what that flag in the upper right corner of the menu bar means, and much more.

96 Shut Down

It's fall-down-on-the-floor-and-find-an-old-pretzel funny!

the disc

12

We have it! And now you do, too. It's the Mac OS 8.1 updater, and it's on The Disc! No more long download times!



the web site

<http://www.macaddict.com>

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Mark Simmons has been slaving away to bring you a devilish digital brew. Only the best URLs, the hottest news stories, and the funniest content make it on the all-new MacAddict Web site. Or something like that.

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PUBLISHER/EDITORIAL DIRECTOR Cheryl England

EDITORIAL

EDITOR David Reynolds

MANAGING EDITOR Ruth Henrich

SENIOR EDITORS Nikki Echler, Kathy Tafel

ASSOCIATE EDITOR Robert Capps (reviews)

CD-ROM EDITOR Wade Albright

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CONTRIBUTING EDITORS Raf Anzovin, Steven Anzovin,
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ART

ART DIRECTOR Ken Bousquet

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PRODUCTION

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NATIONAL AD MANAGER André Lengyel

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editor's note

Yikes! Who is that grizzled person, and what have you done with Cheryl?

As Cheryl mentioned in her Editor's Note last month, *MacAddict* has had some changes. She has moved up to be the ultimate *MacAddict* goddess, the publisher/editorial director. I've stepped up to handle the day-to-day operations at *MacAddict*, and both Kathy Tafel and Nikki Echler have been made senior editors. What does all this mean? We all get more work, mainly. We also get to bring you the best Mac mag around.

But we haven't stopped with that. Now that the inmates (we prefer the term "conformity challenged") have taken over the asylum, we've made a few changes. Here is a peek at what's new at *MacAddict*:

- In the next couple of months, we'll be publishing never-before-seen screenshots of Allegro. The most amazing feature of this new Mac OS is its telepathic user interface—just think about it and it crashes.

- We've included a demo of Apple's not-so-secret NC on The Disc. Find it and win!

- Active assistants, such as the ones you'll find in Office 98, have taken over our software. Now, in Myth, we see a little Molotov cocktail that pops up and says, "You know, if you take out those dwarves, your thrall can get the flag with no problems."

- In a stunning coup de grâce, Disc editor Wade Albright has procured ten of the hottest vapor shareware programs, one of which is the Vapor Finder. Use the Vapor Finder to locate the other vaporware on The Disc.

We also have used our extensive industry contacts to come up with word of several Mac-related mergers that will produce some great hybrid games:

- Berkeley Systems and FWB will coproduce

a new gaming utility—You Don't Know Jack Hammer—in which you have to answer zany questions or your hard drive's B-tree will be corrupted.

- MetaCreations and Shiny will join forces on an amazing game with the most confusing interface ever—MDKPT.

- Domark and Extensis will team up to produce Preflying Nightmares. This game not only helps you prepare documents for the printer, it also shoots down competition on the way to the service bureau.

Oh, and by the way, April Fool—with a twist. The change of face is real; the rest, well, came from the brilliant mind of Kathy Tafel. Cheryl has indeed gone on to lead *MacAddict* from a higher place. Although she won't be doing the day-to-day editorial stuff, rest assured that she'll still have a hand in making sure *MacAddict* continues to be a great Mac magazine.

And who am I? I've been with *MacAddict* since the beginning, back in those heady days when Gil Amelio had just taken the reins, and Copland was the Next Big Thing. This was way back in 1996. Before that, I evangelized Macs on my college campus as an Apple student representative, I sold Macs at the same place, and I ran my own Mac consulting business. And yes, I paid a lot of money for a Mac Plus back in 1987. It now sits on a shelf next to my desk, waiting for Wade to solder a bad monitor connection.

MacAddict isn't going to go through any radical changes. We will be tweaking the magazine over the next few months to give you more of what you've been asking for—more how-tos, more graphics, more sound, and more general kookiness from your favorite Mac enthusiasts. I can't wait to show you what we have in store for the next year.

—David Reynolds and the editors of *MacAddict*

After only a few weeks, it's become abundantly clear that you folks actually read our magazine; you don't just buy it because of its spiffy layout and design. You also write us to let us know exactly what you like, don't like, and want to see in the magazine, even if you have to kill someone to get it. Here's a sampling of what's been on your mind:

- If you've seen The Disc, you already know that Apple's Mac OS 8.1 update is on there—just as you requested.

Kathy Tafel also arranged to get more than 60MB of Apple software updates on the same CD-ROM. Now if that isn't value, then I don't know what is.

- Yeah, we know you have to have something in the Trash in order to get the contextual menu to actually say "Empty Trash." We figured out that this must be what the *contextual* in *contextual menu* meant.

- Command-Shift-4 is the actual key combination to take a screenshot of part of your Mac's screen.

- Some folks ran into problems with removing CFM-68K libraries. Some programs (such as Claris Mailer) won't work without them, even though they have been rolled into the System file. As we stated in the February issue in "Performance Tweaking 101," don't throw them out. Just move them to a new place and see if your software functions. If it doesn't, put them back.

- Most important, things are looking up for Apple, and Mac enthusiasts are feeling upbeat. Although it's too soon to announce that Apple has solved all its problems and is well on the road to greatness, it's pretty clear that Steve Jobs, like him or not, has given Apple direction and focused the company on what it does well. So far.

Some matters to attend to

Now that the inmates have taken over the asylum, we've made a few changes.

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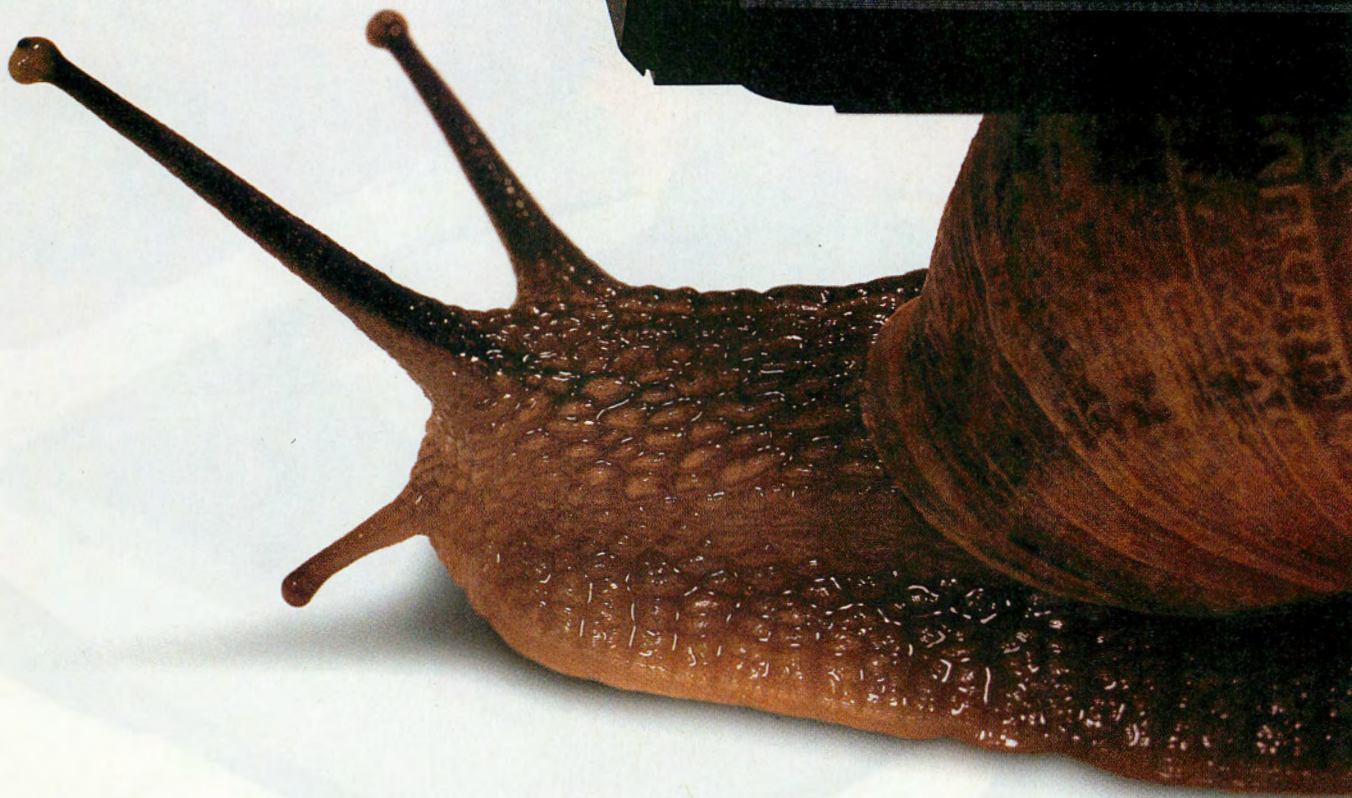


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This has got to mean something, but what? My in-laws are over Christmas morning, as usual, for breakfast. Afterward, when we're out in the living room and my kids are opening their gifts, my father-in-law spills his coffee all over an end table! It gets cleaned up, but later I notice that my January issue of *MacAddict*, the one with Steve Jobs on the cover, has a wet, brownish stain on the front. Well, I stifle my horror and get a towel to dry it off. Later, however, when it dries, Steve starts to flake off. He's half gone now! Is this an omen? Is it about Steve Jobs or *MacAddict*? Maybe if I can find all the flakes and paste them back on, nothing will happen! Let's hope it's just bad ink!

—STEVEN YOCKEY



Uhohherecomesmyguidancecounselor...

—PAUL N. WHANNEL.

It sounded too good to be true! It was! Maybe next month.

—JOE BALL

Is it just me, or do you guys also get some perverse pleasure out of deleting a huge number of files at one time? Ooooh, I just love it when I can clear out 115.3 megs of information with one swipe of the ...talk about an adrenaline rush. (Aaah, that's that!)—THE MONKEY BOY


OK. Right above the month and year on the spine of the 'zine, there are some dots. What the #\$\$%?! are they?—ALEX SARETZKY

I need help. My husband and I just bought a new home. We are looking to spruce up our office, where we have our Mac. Do you know if there is such a thing as Apple-logo wallpaper borders? We want to have an awesome room that our Mac will feel at home in! If you could ask your readers or do a segment in your magazine, I would appreciate the help.—TAMMY COX

Thought you'd like to know that thanks to the falling rupiah, the magazine's newsstand price jumped up by about 100 percent, with the price presently hovering at around 20 percent of an average middle-class salary. Pretty much

RECENTLY SIGHTED

AUSTIN M

A black and white portrait of Austin M. Jones, a man with short dark hair, wearing a dark jacket over a light-colored shirt. He is looking directly at the camera with a slight smile.

AUSTIN MINI MAC!



Jeffrey "Mini Mac Man" Southwick decided, on moving to England, that he simply had to make his mark on a newly acquired 1980 Austin Mini. So he did, in true Mac addict style. Now, people ask him Mac questions wherever he drives!

Please tell Robert to *call home*! That is, if he knows where that is. At least he should check his sfo email! We missed you, Cheryl, at Macworld Expo.—BILL CAPPS

I just finished watching "It's a Wonderful Mac" and wanted to tell you how much I liked it. So much, in fact, that I take back what I said about you guys when you lost my November issue. I was in tears of joy and laughter. Keep up the good work and your sense of humor. P.S. Can I get you to send me a new PowerBook? It seems mine shorted out.—BERNIE BAETZEL

I loved your movie on February's Disc! It was hilarious! OK, bye now.—MICHAEL THOLE

Bwahahahahahahaha! That was brilliant!
Encore, encore!—IAN AND SARAH SAMMIS

I just got done watching "It's a Wonderful Mac." It was pretty good. 'Course, since I was watching it at school, a bunch of teachers crowded around. I think that they think I'm on

useless information, I know. Then again, I've always been attracted to useless info, like moths to flame, or bad jokes to Pamela Anderson Lee, or... well, you get the idea. Oh, by the by, if you have any useless info, feel free to sling it this-away.—ADITYA JAYA

You Don't Date, Do You?

I was thinking about all your references to Mac hardware's being "sexy."

Sexy indeed—in the *Macintosh Bible, Third Edition*, the "Basic Mac Hardware" chapter begins on page 69.—MATTHEW PAYNE

If We Told You, We'd Have to Kill You

Do you guys time travel? On page 48 of Jan/98, the top window contains dates that say "Tomorrow, 9:21 PM," and so on. Also, you jumped from Volume 2, Issue 11, in the Nov/97 issue to Volume 2, Issue 16, in the Dec/97 issue! There must be something fishy going on in there!—KING CHUNG HUANG

Make It Pepperoni

Hungry right now. I'm going for pizza. Do you want some? They deliver to your house. Don't think I know where you live. No, this isn't another hate mail letter—you probably receive a lot. I was just making a statement. Geez! Don't get so defensive!—FREDDY KENNETY

You Know You're A Mac Addict When...

...you think a dip switch is some sort of exotic scam Bill Gates pulls with a double to escape the press while on vacation.

...the first thing you think of after hearing the term *DOS* is *Boat*.

...you look at the latest deals on the fastest Wintel systems and realize that you gave a better, more usable computer away to Goodwill last year.

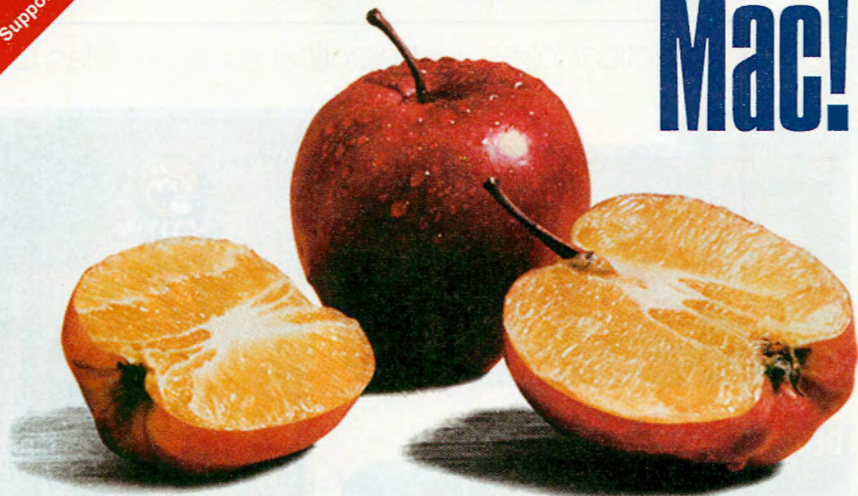
...you are running the latest application and system software on a computer made during the Reagan administration.

...overhearing the words *plug and play* doesn't set your expensive psychotherapy progress back by seven months.

—BERT CHADICK

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And the OrangePC's software application has made quantum strides as well. It sports 32-bit drivers

facilitating CD-ROM long file names and NDIS3 networking. Our exclusive SnapshotSM feature allows a Windows screen to see the Mac environment and the Mac screen to display the Windows environment in a Mac window. It's like a "picture in picture" on your TV!

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General Utilities	\$29.95
Internet	\$44.95
Graphics/Multimedia	\$35.00
Finance	\$39.95
Finance	\$27.95
Games	\$46.00
Productivity	\$20.00
General Utilities	\$30.00
Games	\$29.99
Games	\$29.99
Internet	\$29.95

So remember how a few



months ago—like eight—we showed off this main screen as a placeholder for a big, huge redesign? This time we mean it, we really have something in the works. Please bear with us and we'll provide more details later.—KT

GETTING STARTED

1. Pop The Disc into your CD-ROM drive.
2. Double-click the MacAddict Tour icon for PowerPC or 68K Macintosh.
3. Have fun!

REQUIREMENTS

Any Mac can access the shareware, demos, and system software from the Finder. Accessing the full CD-ROM interface requires 12MB of real RAM with System 7.1 or earlier, or 16MB of real RAM with System 7.5 or later.

GETTING HELP: Problems with The Disc? Go to <http://support.imagine-inc.com>.

OUR DISC SPONSORS

To find immediate information from our sponsors, go to the Index (Option-click any help screen). Or you can wait until you see a message from them in the lower-right-hand corner of the main screen. Clicking on the message causes a TV screen to slide down from the top of the page, showcasing more information. You also can access sponsor information from the main window in the Finder.

Bungie—Myth

BUNGIE

800-295-0060

<http://www.bungie.com>

Myth is a tactical-level game of epic battle set in a fantasy world. A multimetric game, Myth gives gamers unprecedented freedom to view the terrain and their forces, orbiting around their heads or zooming in for a close-up. Mastery of formations and disciplined movement of armies are critical to success. Myth features cross-platform networking, while Bungie's MetaServer system makes Internet play simple. Myth includes maps designed for networking and alternate networking scenarios, such as the split-second action of Steal the Bacon and brutal melee of Last Man on the Hill.

Earthlink—TotalAccess



800-395-9425

<http://www.earthlink.net>

TotalAccess is Earthlink's complete software and Internet con-

nection package. It includes Netscape Navigator, award-winning Internet access software, and everything you need to register for complete Internet access in less than five minutes. After the \$25 setup fee, unlimited access is provided for \$19.95 per month. Round-the-clock tech support is provided via an 800 number.

MacSoft—Deadlock



800-229-2714

<http://www.wizworks.com/macsoft>

Only one race will survive. Time is short. Seven alien races struggle to build their empires, but only one will dominate. In Deadlock, every decision you make will determine the ultimate fate of your people, your empire, and your survival. This is the incredible strategy of interplanetary conquest.

STAZ Software—Classroom Publisher



800-348-2823

<http://www.stazsoftware.com>

Classroom Publisher is a desktop publishing program designed with schools, teachers, and students in mind. It allows anyone to quickly and easily create calendars, clip art, greeting cards, and all kinds of reports, banners, and stationery without even picking up a manual! It was written in the world's fastest BASIC compiler—FutureBASIC, also sold by STAZ Software. See the Our Sponsors section on The Disc for more information.

CONTEST

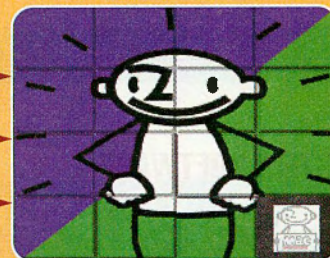
Win!Win!Win!Win!Win!Win!

Get your very own Live Picture! To get to the contest, open the index window and click on "contest." When you solve the puzzle, the CD-ROM will give you a code. Enter this code on the Web site for your chance to win Live Picture (see review on page 46).

Can you turn this...



...into this?



WINNER!

Guy Phillips is now the proud owner of the Complete National Geographic Collection. Since it turned out that the software wasn't as cool as we thought it would be—OK, we gave it a *Blech* (Jan/98, p73)—we will scrounge up something spiffy for Guy to sport. Guy sent in the correct secret code: Wade, the first name of our disc editor. Since Wade was so egotistical that month, we will let you in on a little secret: Here in the MacAddict offices, we like to pronounce Wade as if it rhymed with Sade, not paid.

MORE DEMOS

Carmageddon Demo

ClockWork 1.0

DiskEssentials Demo

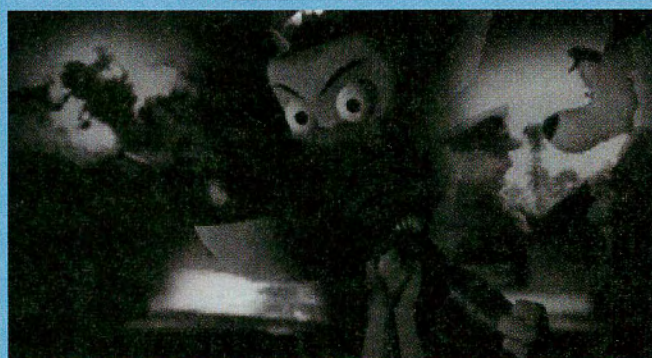
Help! Jan 98 Demo

Mask Pro 1.0

PhotoTools 2.0

Racing Days R Demo

MASTERPIECE Java Noir

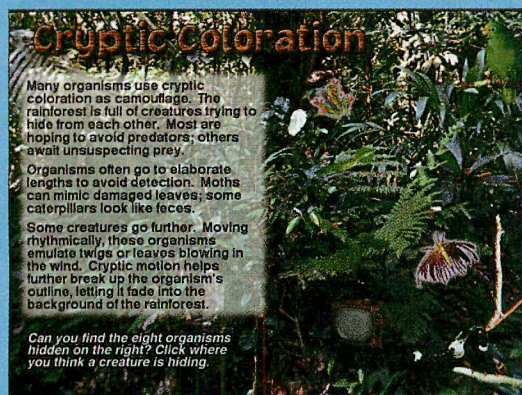


This animated short of Dennis the Dog is nothing short of amazing. We'd say that even if we didn't want contributing editor Raf Anzovin to like us! Look at the shiny nose, marvel at the reflections, laugh at the beans.

MacAddict20:Java Noir

DEMO

Rainforest



This is one of the slickest multimedia jobs we've seen in ages. It's got QTVR, awesome navigation, and fun content about rain forests. Most of the pages in the demo are locked, but you can play games such as this one: spot the camouflaged animals. Two snaps up, way up.

MacAddict20:Software:Commercial Demos:The Rainforest Demo

the disc

SYSTEM SOFTWARE Disk Tools PPC



At the very least, don't reformat your boot volume without first making yourself a handy-dandy Mac OS 8.1 emergency floppy. Prior versions of system software will not be able to recognize disks formatted with HFS+. Copy the contents of the Disk Tools

PPC folder to a freshly formatted floppy.

MacAddict20:Software:Apple:Disk Tools PPC;

MORE APPLE UPDATES

Disk Copy 6.1.3

Location Manager

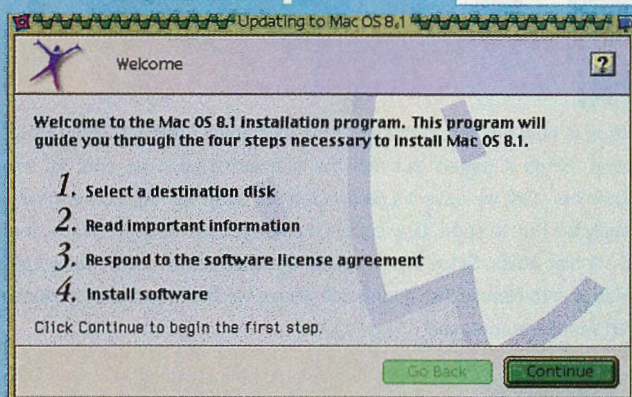
Mac OS Runtime for Java

Password Security 1.0.6

Personal Web Sharing 1.5

QuickDraw 3D 1.0.6

SYSTEM SOFTWARE Mac OS 8.1 updater



Last month (Mar/98, p18) we extolled the virtues of Mac OS 8.1. This month, you get to reap the benefits: on The Disc, you'll find the Mac OS 8.1 updater. Not only that, but we have a full 60MB of Apple software, which includes other updated system components.

That said, we have a few caveats about installing the new system. Remember how the transition from 68K to PowerPC machines was so smooth? Well, that happened because large parts of the operating system were emulated, instead of using the PowerPC chip natively. The touchiest of these components is the file system, which tracks your directories and files. The problem with rewriting the file system natively is that if you break it while you're trying to fix it, you can't run any-

thing, because that's the part of the system that accesses the things you're trying to run.

It's a very touchy problem, and Apple is solving it piecemeal. The Finder was rewritten to use all native code for Mac OS 8. More file formats have been added to 8.1, such as support for DVD drives. Some operations are now faster with virtual memory on, and overall Finder performance has improved. But the biggest change to the system is support for HFS+. The last time the disk format changed, the programmers designed for a 2GB upper limit. HFS+ solves many of the problems such a limit imposed. But be forewarned: Something will probably break if you reformat your disks with HFS+. (You don't need to reformat your drive with HFS+

to use 8.1. It is optional.)

Before you upgrade to Mac OS 8.1, you should look at the 8.1 special report compiled by MacFixIt, MacInTouch, and the Macintosh Resource Page. Pay special attention to the compatibility section to see if any of your software is affected by the upgrade. For instance, owners of Casady & Greene's Conflict Catcher will need to update to version 4.1 to use the new system. Most hard drive utilities will not touch volumes formatted with HFS+; in fact, Apple's Drive Setup and Erase Disk are the only way to make an HFS+ disk.

We also recommend updating over a clean install of Mac OS 8. And you *must* use the U.S. version of the software: Installing over any other version WILL NOT WORK. Still intrigued? Here are the reactions of various MacAddict staffers on upgrading to Mac OS 8:

MARK: Did not reformat with HFS+. Upgraded with no problems and thinks the Finder feels faster.

DAVID: Reformatted with HFS+. Upgraded with one weird problem: one folder won't let itself be deleted from Trash, even with Burn. Renaming a folder with no name

inside that folder renames the enclosing folder. One wacky problem: Sometimes the copy file dialog goes into negative numbers of files. Is it copying back, or what? **WADE:** Upgraded and reformatted internal drive with HFS+. Major problems. A Jaz cartridge (the one used to master this disc) kept losing a directory: the Mac crashed when Wade tried to open it. When copied to the internal drive, the problem copied too, then spread up the directory tree to the top level of the disk hierarchy. Also had the negative copying dialog. Problems seemed to fix themselves after returning to 8.1 and reformatting all disks with FWB Hard Disk ToolKit. Wade's verdict: "I already had 1.2GB free on that disk. I don't need the extra 500MB that badly." Nikki and Kathy bought Wade some crystals and incense at the Psychic Eye bookstore to help exorcise his Mac.

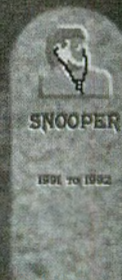
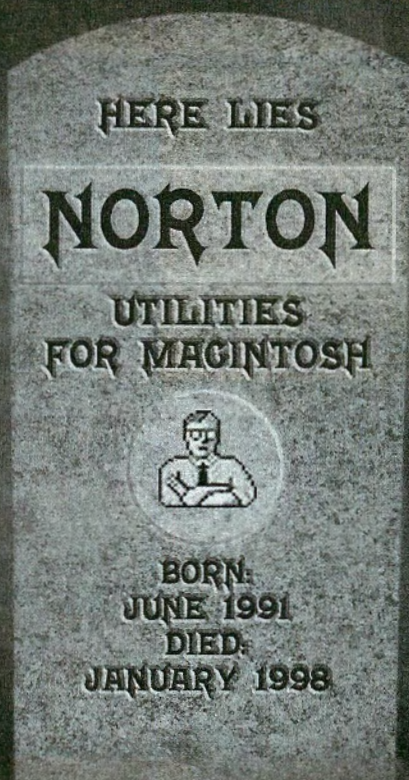
KATHY: Did not reformat with HFS+. Upgraded with no problems, except some beta file utilities crashed more often. Not the system's fault!

Good Luck!

MacAddict20:Software:Apple:

Mac OS 8.1:

Hasta La Vista, Norton™



For many years, Norton Utilities for Macintosh was the premiere utility for correcting drive problems. Until now.

TechTool Pro 2 is now the best troubleshooting utility available for Macintosh. Why? We've recreated all of the best features of NUM and combined them with TechTool's large arsenal of diagnostic tests. This means that not only can you find and correct drive and file problems (like Norton does), but you can also test all those other critical parts of your system that Norton ignores like RAM, CPU, Floppy drives, CD-ROM drives and much, much more. In fact, no other utility on the market can check the fitness of your Macintosh to the extent of TechTool Pro.

Just because TechTool Pro is the most advanced diagnostic utility available doesn't mean it's difficult to use. In fact, with version 2, we've added an easy-to-use interface that makes checking your Macintosh a snap. For the advanced user, our Expert mode allows you to control and configure TechTool Pro in almost any way you wish.

For more information about TechTool Pro 2, call us at the number below or visit our web site. You'll see that anything else is just a box full of bones.

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International: 707-837-8012
FAX: 707-837-0209
info@micromat.com
www.micromat.com

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COMPUTER SYSTEMS
8868 Lakewood Drive
Windsor, CA 95492



TechTool Pro®



DISK UTILITY MacSlack

Slack Space Predictor Settings

To predict how much space a group of files would occupy on a volume of a particular size, MacSlack needs to know the cluster size on the volume. If you know the cluster size you want to use, enter it in the "Cluster size" box. Otherwise, use the Calculator. (MacSlack uses Apple's defaults for calculating HFS+ cluster sizes; see the manual for details.)

Calculator		Direct Entry
Choose a volume type and size.	Volume size in megabytes:	Cluster size in kilobytes:
<input type="radio"/> HFS <input checked="" type="radio"/> HFS+	1024	2
<input type="button" value="Calculate Cluster Size"/>		
<input type="button" value="Accept Current Cluster Size"/>		<input type="button" value="Cancel"/>

Accepting a new cluster size will reset the current statistics.

By now you may be asking yourself, "Self, now why the heck would I want to reformat with HFS+ with all the troubles Wade had?"

Well, if you are bumping up

against the limits of your hard disk space, HFS+ may keep you from needing to buy more storage. But how much is enough? If you work with large media files such as video, audio, or huge high-res images, you probably will see little benefit. But if you have lots of small files, such as a Web browser cache or CodeWarrior project, you could see significant improvement. How much is enough? Well, MacSlack will tell you just how much space you'd save by reformatting in HFS+ (or partitioning your hard drive). You have to read the documentation, because you need to configure the program especially for HFS+. We do not recommend reformatting to HFS+ until third-party utility programs can fix problems on such volumes. At press time, none had been updated to do so.)

MacAddict20:Software:Disk & File:MacSlack 1.0

COMING SOON...

Going through Web calendar withdrawal? Clip 'n' save this list of upcoming special events.

March 17

Happy St. Patrick's Day! As longtime Web-site visitors well know, we habitually dress up for special days. You won't have occasion to pinch us this year, no sir.

April 1

Last year, we embraced the Dark Side and dedicated ourselves to Windows coverage. Unlike some other Mac mags, we did it as an April fool's joke. Come see what absurdities we're planning this time around—but never fear, we'll be back to normal on April 2.

April 15

Apple announces its financial results for the second fiscal quarter of 1998. Sink or swim? We'll tell you the minute the numbers come in.

HOLY COW!

These are the loveliest disc pages I have ever seen!!



FIND AN 8.1 special report at <http://www.macintouch.com/m81.html>

The web site www.macaddict.com

Our Web site features daily news, original articles you won't find in the magazine, and the rantings and ravings of your fellow readers. But wait, there's more—you can get subscription help and contact your beloved MacAddict staff! Here's where to go for reader service.—MS

<http://www.macaddict.com/issues>

Links and extra resources to accompany the magazine you hold in your eager hands.

<http://www.macaddict.com/contact>

Yes, we want to hear from you! Here are email addresses and more.

<http://www.macaddict.com/subscribe>

Join us! Here's our fabulous free-trial-issue subscription offer.

<http://www.macaddict.com/service>

Subscription problems? Missing issues? Vexing questions? Visit our customer service pages.

<http://www.macaddict.com/cdrom>

Wade's liner notes on the MacAddict CD-ROM, late-breaking info, and disc replacement forms.

Didja miss us?

If you haven't come by the MacAddict Web site recently, here are some of the things you've been missing...

<http://www.macaddictnetwork.com>

That's right, our hand-picked network of top-notch Macintosh sites now has its own home page! Check in here every day to find out what's new on the Web's best Mac pages.

<http://www.macaddict.com/news>

In-depth coverage of Mac OS 8.1, the snazzy new Mac OS Extended format, and how its space-saving powers operate. We've also updated our Mac OS 8 site (<http://www.macaddict.com/macos8>) to cover the new system software.

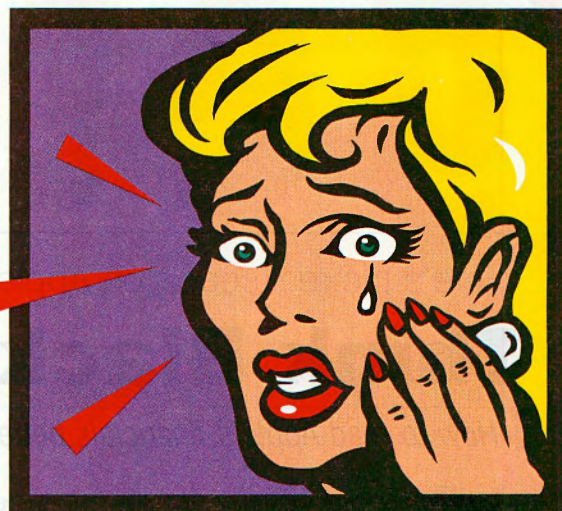
<http://www.macaddict.com/dialog>

Our new MacAddict Mailbag feature gives readers a chance to evaluate Steve Jobs's new look and find out who Doug Engelbart is, anyway. Plus, 1997 in hindsight and cloning reconsidered!

Hard Disk ToolKit 2.5
Now Shipping!

OH NOOOOOO!

We've upgraded to
MacOS 8.0! And now
the boss wants stronger
security, crisis control, and
assurance that our data is safe.

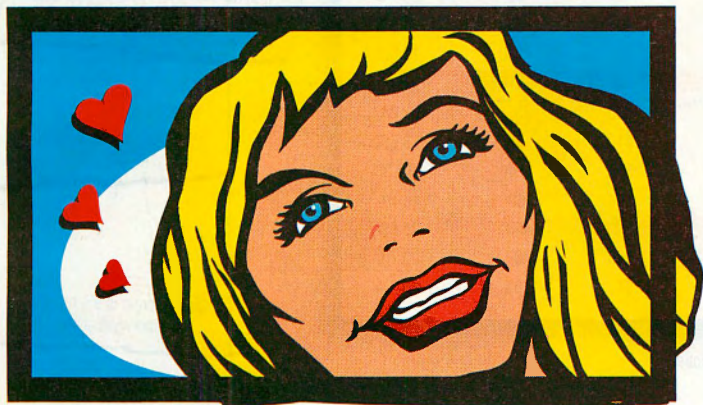


But wait...

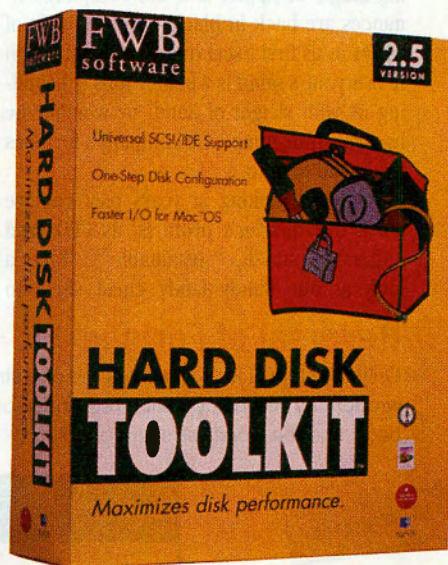
**NOW
SHIPPING!**

Thanks to FWB's new Hard Disk ToolKit 2.5,
I don't have to worry about poor disk drive
performance or compatibility issues!

And, I get master password protection,
bullet-proof encryption, S.M.A.R.T.
support, a bootable crisis CD-ROM
and More!!!



I'll call 1-800-581-4392 and upgrade today!



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MacWAREHOUSE

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FWB
software

**1 in Storage Management.*



get info

Here's the real scoop on Apple's bottom line, Rhapsody, and 3D software.

Think Black

How to read Apple's financials better than your average technology reporter

Ever since we visited NeXT Software's elegant restrooms, we've known Steve's favorite color is black. Jobs has finally worked his magic at Apple, and the company's finances are back in black—with a profit of \$47M in its first fiscal quarter. The question in everyone's mind is whether Jobs is beguiling us with sleight of hand, or whether he has truly transmuted the company's fortunes from lead to gold.

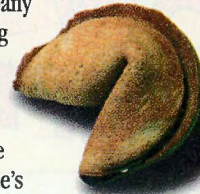
Only by looking at years past can we tell if this quarter's profit is, as CFO Fred Anderson puts it, "sustainable." (Take a look at our handy-dandy cheat sheet to

understand the nitty-gritty.) The seeds of Apple's billion-dollar losses were sown in the mid-nineties. When it had profit margins of well over 40 percent, Apple grew—adding software and hardware projects with little regard for overall company strategy. Quarterly operating expenses rose to upwards of \$550M. Concurrent with the release of Windows 95, the first Mac OS clones shipped. These high-end performers ate into Apple's most profitable market—graphics professionals who will pay any price for performance. At the same time, Apple tried to gain

market share by selling much cheaper machines.

Thus, the profit margins that sustained \$550M were erased, and Apple lost money.

Amelio came on board and reduced some operating costs so that Apple had a profit of \$25M, with higher profit margins in the fourth quarter of 1996. But he didn't reduce spending on research and development; it wasn't until Steve Jobs came on as an advisor that any projects were really cut. Starting in March, and continuing to the present, everything from OpenDoc to the



Reversal of Fortune

Only a historical look illustrates the dire straits Apple found itself in and the hard, painful work wrought by Steve Jobs and Fred Anderson. When reading Apple's fortunes, add the phrase "in bed," and the worst will seem brighter.

Quarter	Sales ¹	Cost of sales ²	Operating expenses ³	Net income ⁴	Gross margin
Q1 1998	1,578	1,225	313	47	22.4%
FY 1997	7,081	5,713	1,771	-1,045	19.3%
Q4 1997	1,614	1,294	353	-161	18.8%
Q3 1997	1,737	1,389	408	-56	20.0%
Q2 1997	1,601	1,298	489	-708	18.9%
Q1 1997	2,129	1,732	521	-120	18.6%
FY 1996	9,833	8,865	2,172	-816	9.8%
Q4 1996	2,321	1,810	505	25	22.0%
Q3 1996	2,179	1,776	519	-32	18.5%
Q2 1996	2,185	2,606	554	-740	-19.3%
Q1 1996	3,148	2,673	594	-69	15.1%
FY 1995	11,062	8,204	2,197	424	25.8%
Q4 1995	3,003	2,382	549	60	20.7%
Q3 1995	2,575	1,847	572	103	28.3%

FY=Fiscal year. Apple's fiscal year starts October 1.

¹How much Apple receives for products.

²How much it costs Apple to physically build products.

³Includes research and development, selling, general, and administrative.

⁴Includes interest and other income, as well as provisions for income taxes.

⁵(Sales-cost of sales)/sales.

Amelio resigns after reducing operating expenses almost \$200M per quarter.

Amelio's first round of restructuring reduces operating expenses by \$75M.

Spindler resigns.

Includes \$75M paid to "Power Computing."

Includes \$375M for the NeXT merger and a \$155M restructuring charge.

If \$28M hadn't been pulled out of the restructuring fund, profit would have been only a couple of million.

Includes a restructuring charge of \$207M.

Gross margin is 9% before inventory valuation.

Spindler tries to grow unit sales by reducing gross margins. It works, but Apple doesn't reduce operating expenses to match.

Wow! Almost \$600M!

Advanced Technology Group was slashed from the R&D budget. On a more positive note, Apple's hardware line is moving to industry-standard parts, which not only reduces the cost of the parts themselves, but also the cost of assembly; Apple is now able to contract with PC assembly lines instead of operating its own plants.

While painful, these actions have reduced the quarter's expenses to just over \$300M. The next quarter may not show any growth in revenues, but Apple should remain profitable since it's running so lean. In the third and fourth quarters, Apple usually gets a boost from the education market, which means growth in revenues. But to really grow again, Apple needs to regain consumer confidence. Turning profit is a good start, but the company also needs to produce exciting products at a low price—never an easy thing to do.—KT

Claris renamed FileMaker, Inc.

As Apple struggles with its bottom line—CFO Fred Anderson wants to reduce quarterly operating expenses further from \$313M to \$300M—and also begins to have an actual strategy, it was just a matter of time before Claris was "restructured." FileMaker, Inc., the company formerly known as Claris, will develop and market FileMaker Pro, FileMaker Pro Server, FileMaker Pro SDK, and Home Page. All Apple-branded software, such as Mac OS 8, Apple Remote Access, and AppleShare, will return to the mother ship, as will the rest of the Claris line, which includes ClarisWorks, Organizer, Impact, Draw, and Emailer. Of those, only the Apple-branded products and ClarisWorks definitely have teams working on future development—Apple would not comment on the future of Organizer, Impact, Draw, and Emailer. But at the very least, there will be no changes right now to how those products are sold. Because about 300 people were laid off, the move will certainly reduce Apple's operating expenses—but at the same time, it makes strategic sense for Apple's sales force to sell both hardware and software.

Rhapsody Roundup

Applications arrive at party a little early

Rhapsody has already come further in the computer world than Copland ever did—Apple shipped a developer release of Rhapsody. Not content to rest on its laurels, the Rhapsody engineering team is readying the first public release of Rhapsody, called Customer Release 1, to be made public sometime in early 1998. Yes, Customer Release 1 was once called Premiere, but Apple figures it makes more sense to go with the Customer Release moniker, seeing as how parts of the Premiere release (such as the Blue Box) have already shipped. Rhapsody is not being touted as the replacement to the Mac OS, as it was last April, but we saw plenty of cool stuff coming up for Rhapsody while we wandered the Macworld Expo halls this January:

Create

Stone Design, 505-345-4800, <http://www.stone.com>, \$249, available now—Create is a vector-based drawing application (with blends, guides, PostScript patterns, and other typical drawing-app stuff) that also handles animations, video, plug-ins, and a PostScript Editor (for the seriously geeky graphics folks).

TIFFany 3

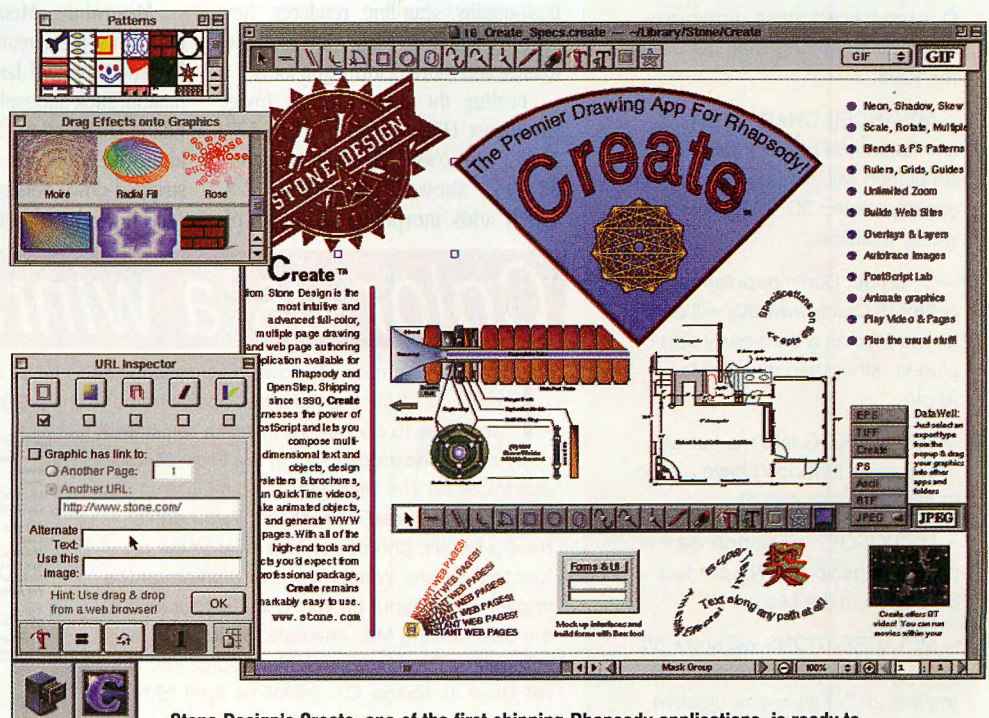
Caffeine Software, 408-249-1290, <http://www.caffeinesoft.com>, \$595, preview release avail-

able now—Where would Rhapsodic graphics folks be without an image editor? We'll never have to find out, thanks to TIFFany. TIFFany does the typical image-editing stuff, and, thanks partially to Rhapsody object-oriented design, it can record users' actions and play them back in user-controlled groups.

OmniPDF, OmniWeb

Omni Group, 800-315-6664 or 206-523-4152, <http://www.omnigroup.com>, free single-user license available for each, preview release available now—The good folks at Omni Development are making sure that Rhapsody won't arrive on the digital scene without some way to get at information. OmniPDF is a Rhapsody-native PDF document reader; OmniWeb is your basic, modern Web browser (with some great multithreaded capabilities).

Other items shown on the floor included ZoneWarrior (a space shoot-'em-up) from Casady & Greene; Stalker Software's CommuniGate messaging software; P&L Systems' Mesa spreadsheet; Objective-Everything scripting software from TipTop Software; servers from Helios; the OpenBase SQL database engine; and QuantaReport, a database-access and report-writer application. Phew!—DR



Stone Design's Create, one of the first shipping Rhapsody applications, is ready to go whenever Rhapsody is. Create is a multipage drawing application—something like Illustrator for Rhapsody.

get info

get info

3D Explosion

3D takes flight at Macworld Expo with advanced features, increased speed, new products

Mac addicts sick with SGI envy can take heart: powerful 3D graphics and animation were everywhere at January's Macworld Expo.

Credit Commodore's weirdly undead Amiga for the show's best all-around 3D apps. Amiga-born Lightwave 3D for Power Mac (Newtek Partners LP, 800-368-5441 or 210-370-8000, <http://www.newtek.com>, \$1,995) was out in version 5.5, with new volumetric lighting, beefed-up morphing and inverse kinematics for character animation, a particle animation system, and a much improved and more stable interface. Third-party LW plug-ins offered animatable hair, physics simulation, and other abilities.

Snapping at Lightwave's heels was another Amiga port, Cinema 4D XL (Maxon Computer, distributed by 3D Gear, 888-283-5634 or 805-388-5510, <http://www.cinema4dusa.com>, \$1,995), which had its worldwide debut at the show. This full-featured powerhouse, sporting almost every known modeling, animation, and rendering tool except physics simulation, boasts the planet's fastest ray tracing renderer and can import Lightwave files. Step lively, Newtek!

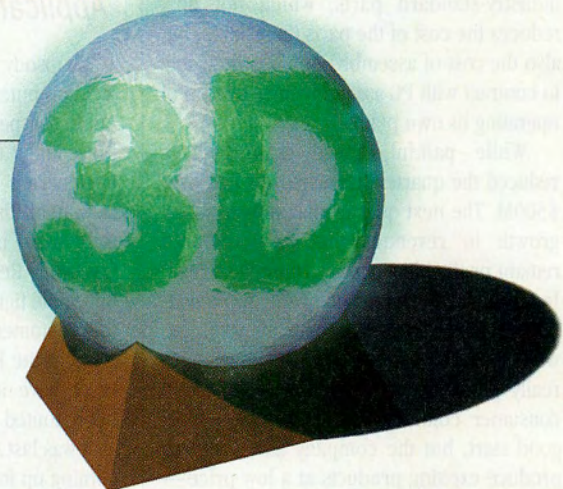
Studio Pro 2.1 (Strata, 800-678-7282, <http://www.strata.com>, \$1,495), Strata's venerable modeling, animation, and rendering package, was newly stable and shipping with a faster, high-quality scan-line renderer. New plug-ins add hair, jiggle, inverse kinematics, and more deformation tools.

Feeling the heat, Electric Image Broadcast (Electric Image, 626-577-1627, <http://www.electricimage.com>, \$2,495) showed off version 2.8, which adds morphing, IK, depth-of-

field, and volumetric tools remarkably similar to those in LW and C4D XL. But EI's frozen-in-beta modeler was nowhere in sight. EI users who needed to build objects as well as animate them were directed to auto-des-sys (614-488-8838, <http://www.formz.com>), maker of the \$1,495 3D modeler form-Z 2.9.5. RenderZone, form-Z's \$1,995 add-on renderer, was newly raydiosity-equipped. For a lower-priced modeling solution, EI folks could try quirky little Amapi Studio 3.03 (Template Graphics Software, <http://www.yonowat.com>, \$349).

Perennial niche player Hash (360-750-0042, <http://www.hash.com>)—yet another Amiga crossover—had character animators agog with the unique capabilities of Martin Hash's 3D Animation Version 5. (Hey, Martin, why not just call it Hash5?) Indifferent rendering quality and the company's inexplicable but deep-seated dread of Mac press coverage are all that keep this \$199 package from hitting the big time.

Meanwhile, MetaCreations (800-459-5188 or 805-566-6200, <http://www.metacreations.com>) trolled successfully for 3D bottom-feeders. Ultracool landscape generator Bryce 3D (\$299) added animation, slick atmospheric effects, and a more accessible Deep Texture Editor. Logomotion (\$149) emerged from obscurity with version 2.1's improved tools for flying logos. And Ray Dream 3D (\$99), the stripped-down version of Ray Dream Studio 5 (\$499), was the last (and lowest) word in 3D for the Mac masses.—Steven Anzovin



RAF ANZOVIN

3D Crystal Ball

Our ray-traced glass globe predicts the following Mac 3D trends for 1998:

—ADVANCED CHARACTER animation and real-world physics simulation will trickle down to more apps as cheap 3D code becomes widely available.

—OPENGL, Sun's popular competitor to QuickDraw 3D, will arrive for the Mac as a third-party app or plug-in rather than directly via Apple.

—THE 3D PLUG-INS market will thrive; apps that don't have a plug-in API will wither and die.

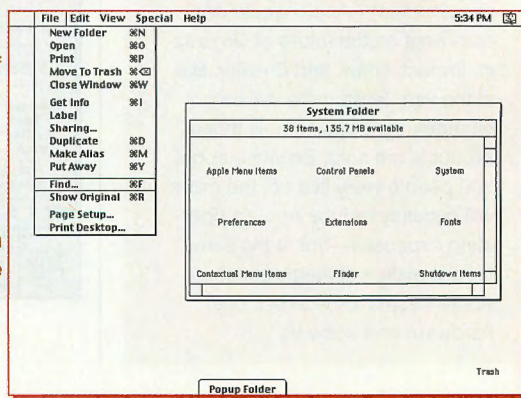
—MICROSOFT will announce it is porting flagship SGI/NT product Softimage to the Mac.

—METACREATIONS will show off an early version of MetaUniverse, the first 2D/3D all-in-one creative environment. Coding for the semi-secret project proceeds apace.

Color us a winner!

Too lazy to create your own Kaleidoscope scheme as shown by Mark Simmons on page 32? With the Kaleidoscope Scheme Archive CD-ROM you'll have hundreds of schemes to choose from, and a registered

copy of Kaleidoscope itself. In the From MacAddict folder on The Disc, you'll find a Contest Stuff folder. Follow those instructions. If you don't have a printer, photocopy and enlarge the picture to the right. With crayons or markers or the implements of your choice, color in your idea of the best-looking Mac interface. Send your scheme to Those Wackos, MacAddict, 150 North Hill Drive, Brisbane, CA, 94005 by April 15th. The totally subjective judges will pick the best scheme, and their decision is final. Find KSA on the Web at <http://www.sitelink.net/cdinfo.shtml>.



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get info

get info

Commanded & Conquered

In a recent article on cheating at your favorite game (Dec/97, p59), we reported that several cheats were available in Command & Conquer. Although we hate to admit it, we were wrong. The cheat codes we talked about were apparently in the beta version of Command & Conquer, but they didn't

make it to the shipping version of the product. Fear not, devoted cheaters! If you're still looking for the upper hand in your Command & Conquer games, several editor applications (such as C&C Edit or Y.A.C.A.C.E.) let you browse and edit maps and scenarios, and there are other cheats (such as the silo money cheat and the sandbag cheat) detailed in several Command & Conquer FAQs.—DR

DVD Debriefing

Shopping for new technology can be so confusing. We MacAddict Lab technicians don't want a repeat of that Performa mix-up last Christmas, so we created a list of features differentiating the brand-new DVD players from the more popular and widely distributed BVDs.

—Matthew King

	DVD	BVD
New, redesigned fit	•	•
Holds 4.7GB per side	•	
Heat-resistant waistband		•
16-, 20-, or 24-bit audio at either 48kHz or 96kHz	•	
Free of dot crawl and cross-color configuration	•	
100 percent preshrunk cotton		•
MPEG2 compression	•	
Elastic compression		•
Thick fabric and strong seams		•
Multiple layers for various configurations	•	•
Bit rate fluctuates	•	
Capacity is up, size isn't	•	•

Max Saved!

"Woohoo," cried the ebullient Yousef Ali, upon notification that he had won January's Fallout contest. Yousef was one of thousands who were able to prevent Max from getting hanged on our Web site. The correct word in our Hangmax contest was,

curiously enough, *halflife*. We hope Yousef will be adroit enough to avoid the radiated mutants in MacPlay's hot game, and cries of joy, instead of screams of defeat, will be heard in his Mitchellville, Maryland, neighborhood.—KT

The MacAddict Index

Number of months between release of Mac OS 8 and (scheduled) release of Now Utilities for OS 8: 8

Number of attendees at last year's San Francisco Macworld Expo and this year's, respectively: 76,100 and 68,000

Number of days a week that the Apple Store operates, according to Apple CFO Fred Anderson: 365*

FOCUS ON: OFFICE POLITICS!

Hours of customer research conducted during development of Office 98 Macintosh Edition: 25,000

Percentage of Microsoft Word alerts that are related to spell-checking: 60

Percentage of spell-checker suggestions that users reject: 67

Percentage of Microsoft Word features used by more than one in two users: 8

Percentage of Microsoft Excel features used by more than one in five users: 13

FOCUS ON: INSIDE INFO.APPLE.COM!

Average number of hits served by Apple's info.apple.com support site, per day, during November 1997: 590,471

Average number of unique IP addresses served, per day, during this period: 31,150

Average number of gigabytes downloaded, per day, during this period: 68

Number of FTP servers used to host Apple's software libraries: 29

Maximum number of connections these servers can support: 14,500

* Not adjusted for leap years. Sources may be found at the MacAddict Web site.—MS

Now, recover things even Norton can't

Introducing Aladdin FlashBack™

FlashBack your work and you're protected.

Protected against loss by accidental deletion, file corruption, *even from hitting the save key and over writing your file*. Aladdin FlashBack is a whole new way to protect your files.

With FlashBack you can recover not only lost or damaged files, but even previous versions of files that you changed, even if you made the changes months ago.

Unlimited undos

Discover the power—and time savings—of unlimited undos. FlashBack tracks changes made to a file every time you hit Save. Recover from changes even after you've quit your application, turned your computer off and gone home. If you ever saved a FlashBacked file, you can recover it exactly as it was at that time.

Works on any file If your application saves files, FlashBack will protect you. From word processors to graphics programs, from databases to spreadsheets, from HTML to C++.



Instant file recovery Restore any file you've protected just by double clicking. No confusing procedures, no complex operations. It doesn't get any faster or easier.

Plus, FlashBack works with both local and networked files.

Save Disk Space

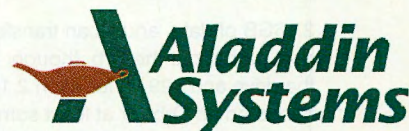
Keep multiple versions of your important files without gobbling up disk space. FlashBack makes only one complete copy of your file. Previous versions are tracked through tiny "diff" files containing only the changes, or differences, between one version and the next. The result? You can save five, ten, twenty or more versions of a file in less room than you would use hitting 'Save as' just a couple of times!

Time & Date

Stamping FlashBack time and date stamps each version it saves, making it the organized alternative to cluttering up your folders with cryptically named 'Save as' files!

It's a new level of protection. Beyond backup; beyond file recovery.

FlashBack gives you a whole new way to protect your files and save your sanity.



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on your MacAddict CD
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cravings

Five fine items meant to make your eyes pop way out of your head.

bluVenom Anti-Theft Device

Do you constantly worry that someone will pick up your Mac and abscond with it? Oh, not so much because you have invaluable data on your Mac (after all, you spend most of your day using the company's Internet connection to check out chat rooms), but you haven't cleaned under your Mac for a very long time, and if it's moved, all that dirt will be exposed. The bluVenom Anti-Theft Device will put your mind at ease. Something like a

car alarm for your Mac, the bluVenom device locks into your Mac's floppy port and

screams at 120 decibels if someone moves it. Before it lets loose, however, the bluVenom makes a warning snake hiss if it's bumped or jostled. For only \$59.95, you too can have one of life's most annoying devices—a device alarm. Contact bluVenom at 604-526-2021 or 888-326-3388, or point your browser to <http://www.bluvenom.com>.

PROTECT YOUR MAC FROM ATTACK



Case bluVenom



Orb

Castlewood Systems

Round like the item it's named for (and it wouldn't spin well if it were square, now would it?), the Orb removable-media hard drive is the niftiest storage device to come along in quite some time. It's perfect for all those *America's Funniest Home Video* archives that have been taking up space on your hard drive all these years. That wacky

Bob Saget...

UNLIMITED STORAGE POWER, ITTY BITTY SPACE

Each Orb cartridge holds

2.16GB of data, and it can transfer 12.2MB per second. The best part about the Orb, though, is its price—a mere \$199 for the drive and \$29.95 for each 2.16GB cartridge. To get your hands on an Orb (or at least some more information), contact Castlewood Systems at 510-224-9900 or go to <http://www.castlewoodsystems.com>.



Surf Express

Connectix

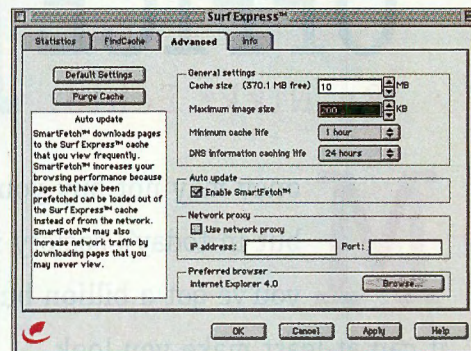
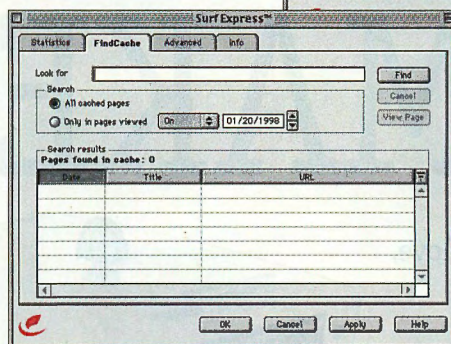
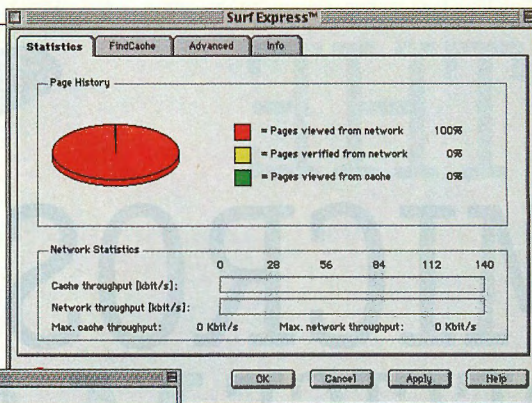
BETTER THAN DIGITAL WAX

But those folks who invented the term *World Wide Wait* thought they were clever. Yeah, reeeal clever. Funny how things change when you have to visit the same site over and over to record any changes. Sure, the Web Change Agent job *sounded* glamorous, but all this clicking and waiting—it's enough to make one consider a gun permit. Consider Surf Express from Connectix instead. With its advanced caching

mechanisms, Surf Express can speed the reloading of pages you've already visited.

Plus, you can

search the cache files for previously visited pages without having to remember and retype URLs. For only \$34.95 and a call to Connectix at 650-517-5100 or 800-950-5880 (or <http://www.connectix.com>), you can speed your Web browser's performance and save yourself a lot of waiting time.



Ray Gun

Arboretum



That annoying 60Hz hum in your digital master of the bootleg recording of The Cranks' song "I Wanna Go Back to My Little Grass Shack" is about to drive you over the edge. You must have been too close to that power transformer on the scaffolding over the arena. Besides the hum on the tape, little metal objects have been sticking to you since you left the stadium. Arboretum's latest utility, Ray Gun, can't help

with that, but it can get rid of that electrical hum. **NO CLICKS, NO HUMS, NO WORRIES** Ray Gun cleans audio files of hisses, pops, hums, crackles, and other noisy elements without destroying the rich—or not-so-rich—audio within. Ray Gun makes use of a simple black-box interface with a few deceptively powerful controls. To get a copy of Ray Gun, get your \$99 and call Arboretum at 415-626-4440 or 800-700-7390, or go to <http://www.arboretum.com>.

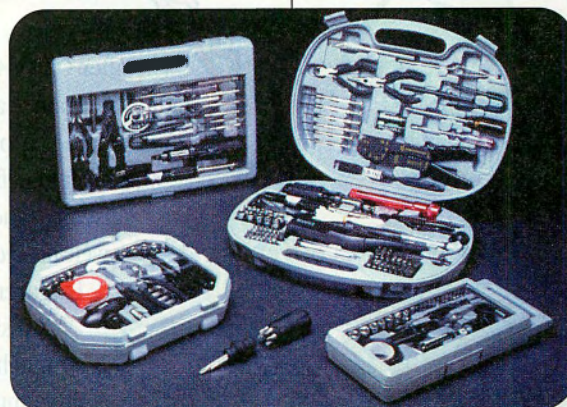
TK11 145-Piece Deluxe Tool Kit

Curtis

TOOLS TO DROOL OVER

"The right tool for the job," your mother used to say. "Always choose the right tool for the job." Then she'd hand you a pitted flathead screwdriver with a broken handle and walk away, her faint, low laughter lingering after her. You've never quite understood those little encounters, but you do understand enough to realize that a pitted screwdriver won't go very far in maintaining your Mac—especially if you have one of the old 8500/9500 tower

cases. You have learned enough to know that Curtis makes amazing tool kits, and the TK11 Tool Kit is no exception. This beautiful 145-piece set includes everything you could possibly want for Mac maintenance. It has a socket, needle-nose pliers, wire cutters, a paint brush, little bitty screwdrivers, and lots, lots more—including a complete set of difficult-to-find Torx screwdrivers. The tools all come in a heavy-duty molded-plastic case. And now, with the TK11 Tool Kit, you can finally "fix" the brake lines on your mother's car. To get more information, call Curtis at 800-272-2366 or 319-263-8144, or go to <http://www.esselte.com/curtis/index.html> and be prepared to spend \$124.98 on your beautiful new collection of shiny, nonpitted tools.



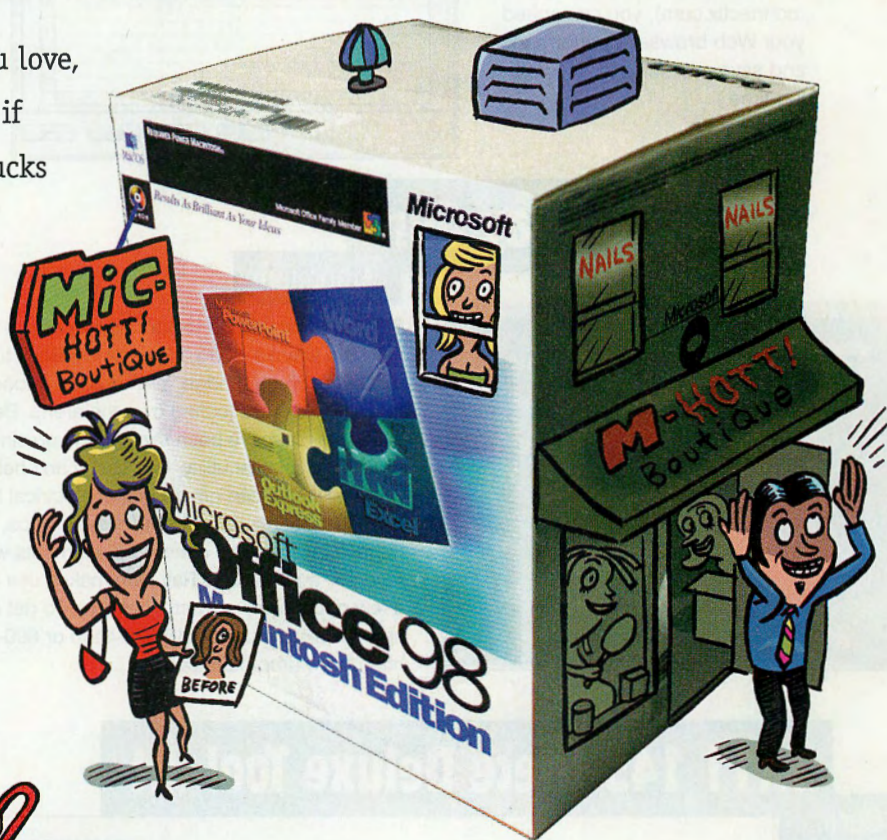


THE MICROSOFT OFFICE MAKEOVER

By Nikki Echler

Money may not buy you love, but in today's society if you've got a billion bucks

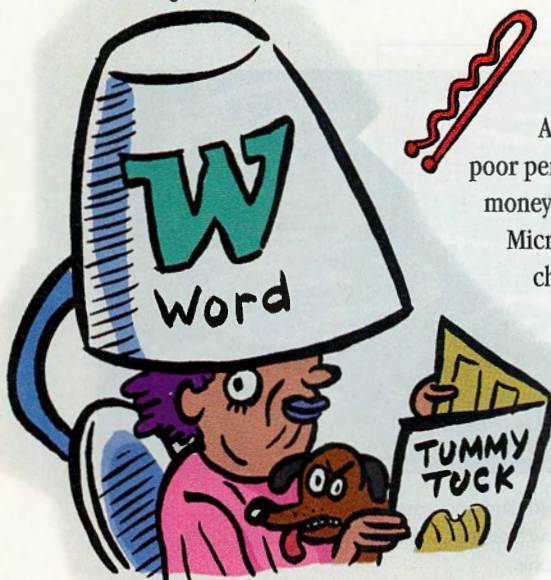
it can at least make you look good. Any ugly duckling with enough cash for a quality plastic surgeon can be transformed into a swan with a few nips, tucks, and well-placed plastic moldings. At least, that seems to be the case for Microsoft Office, which went from totally weak in Office 4.2 to totally chic in Office 98.



After Office 4.2 exploded like a bomb on a Mac market that was shocked at Office's poor performance and Windows-like design, Microsoft heard the screams and poured more money into the project. The result was a small but agile business unit created within Microsoft to define and refine Mac-only products. After a couple of years of hammering, chiseling, and coding, the doctors Frankenstein transformed their monster into a well-heeled suite of killer apps, including Word, Excel, PowerPoint, Internet Explorer, and the newcomer Outlook Express, an Internet-based email client.

Not since Tammy Faye Bakker finally washed her face has a new look brought so much relief to so many people. However, a makeover of such epic proportions must be seen to be truly believed. So sit down, take a deep breath, and watch as we show you the hottest before and after features of the product you'll hate to love.

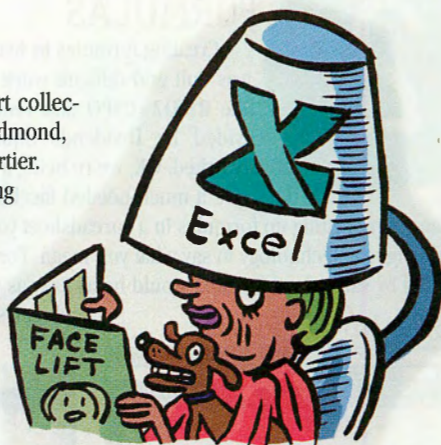
Illustrations by Lloyd Dangle



1

OFFICE ART

As Bill buys up more and more of the world's precious art collections (you should see the pieces on display at the Redmond, Washington, campus), Microsoft products seem to get artier. Whether or not there's a connection, the new suite of drawing tools in Office 98 draws circles, squares, and even 3D cubes around its predecessor's lame art supplies. The clip art still fails to inspire, but everything else rocks in its capable simplicity, whether it's creating 3D headlines, text wraps, AutoShapes, or freehand designs. Contextual menus make quick work of grouping items, flipping between fonts, and other forms of simple object editing.



office

BEFORE

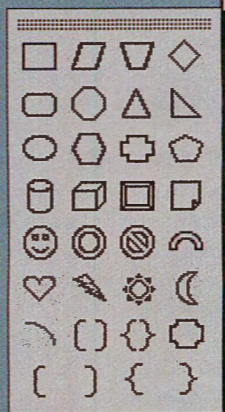


IF OFFICE 4.2 AND OFFICE 98 GOT IN A FIGHT, the new, pumped-up Drawing toolbar would kick the shapes right out of its scrawny predecessor. WordArt, AutoShapes, Shadows, and 3-D Shapes and Settings are all new to the Office. Go meet them.

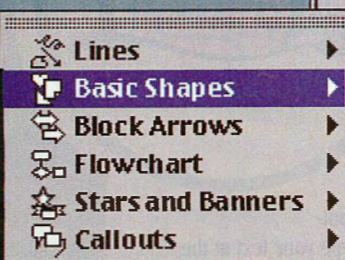


AFTER

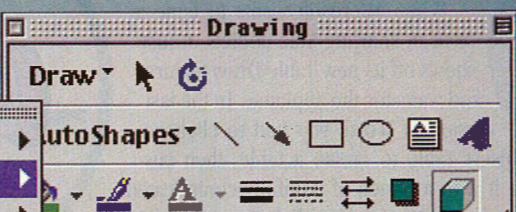
The **Draw** tool enables you to nudge, align, flip, rotate, and otherwise move your objects.



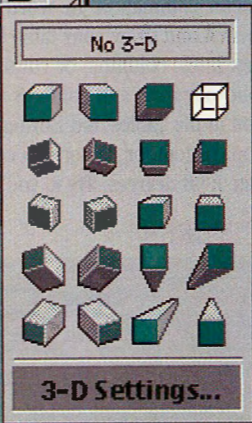
Use the **Shadow** tool to create and edit shadows for your objects.



AutoShapes lets you quickly create pre-designed lines, shapes, arrows, flowcharts, stars, banners, and call-out text balloons.

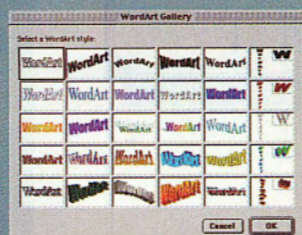


These new drawing tools are really cool. Even if you can't draw.



Give your project depth by creating and editing **3D shapes** with the 3D tool.

WordArt supplies you with a selection of amped-up headline styles that you can edit at will.



2

FORMULAS

Creating formulas in Excel was never exactly child's play. In fact, it was dull and difficult work for adults forced to visualize an equation like $R2/D2=C3P0$ and remember that it meant Revenue Times Two Divided by Dividends Squared Equals Cost Times Three People Overworked. OK, we're being a little silly, but the Office 98 makeover really does give a much-needed facelift to what was once a tiresome chore. Now when you're setting up formulas in a spreadsheet you can take advantage of the program's natural-language technology to say what you mean. For example, if you want Excel to sum up cost divided by sales, your formula would be as easy as writing " $=cost/sales$ " instead of figuring in each cell's alphanumeric reference points.

NEW AND IMPROVED

Month	Cost	Sales	Cost Per Sales
January	100	200	0.5
February	200	300	0.66666667
March	400	900	0.5
April	200	900	0.22222222
May	25	6578	0.003800547
June	435	6274	0.0694976
July	5334	789	6.760456274
August	323	4343	0.07437256
September	8976	46544	0.19294777
October	43	654564	6.56284e-05
November	453	43333	0.01045899
December	64564	9584	6.736644407

Month	Cost	Sales	Cost Per Sales
January	100	200	0.5
February	200	300	0.66666667
March	400	900	0.5
April	200	900	0.22222222
May	25	6578	0.003800547
June	435	6274	0.0694976
July	5334	789	6.760456274
August	323	4343	0.07437256
September	8976	46544	0.19294777
October	43	654564	6.56284e-05
November	453	43333	0.01045899
December	64564	9584	6.736644407

IN EXCEL 98 cryptic formulas, such as $D6=B6/C6$, get visual for mathphobes who now can just type in $D6=cost/sales$. The new RangeFinder lets you track the cells in a formula by coloring their frames. Drag and drop the colored frames to edit the formulas.

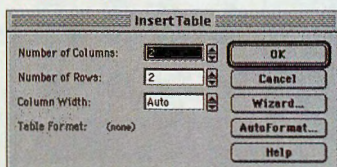
3

TABLE DRAW

When Microsoft wants to tame a pack of snarling Mac addicts, it just shows off its new Table Draw feature and waits for the applause. In the last version of Word, you had to click on Insert Table to create a table, then customize it with a bunch of painfully complicated menu commands. In Word 98 you just click on a tiny digital pencil and draw your table line by line. If you want to get rid of a few lines, columns, or rows, you reach for the digital eraser. Evening out your rows and columns is as simple as selecting them and tapping a button in the Tables and Borders toolbar. And in this version you can also type your text at the top, bottom, or center of a cell and rotate it 90 degrees. Try it, you'll like it.



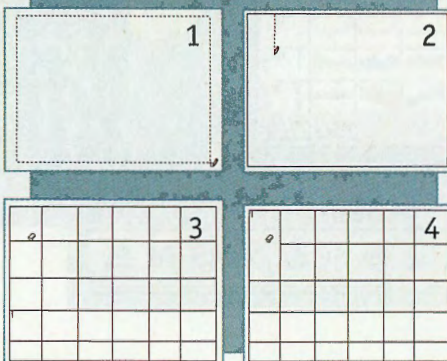
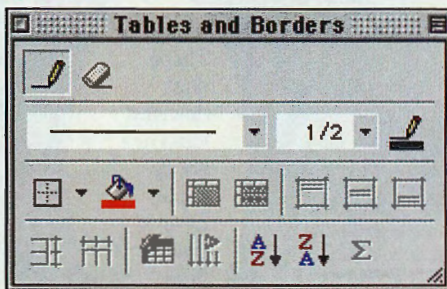
BEFORE



IF YOU'RE TECHNOSAVVY ENOUGH to work a pencil and an eraser, you can make tables in Word 98 (unfortunately, the Table menu doesn't exist in Excel).

- 1) Select Draw Table from the Table Menu and then use your pencil tool to draw the outline of your table.
- 2) Use the pencil to add rows and columns.
- 3) Oops. If you make a mistake, grab your eraser tool and start rubbing out the offending line.
- 4) Voilà. That part of the line is gone!

AFTER



MACINTOSH ONLY

"We're starting to see two phrases come back in the Mac market: 'First on Macintosh' and 'Only on Macintosh.'"—Steve Jobs at San Francisco's Macworld Expo. Not only did Microsoft's Mac team create a separate version of its ubiquitous Office suite to please Mac addicts, but they made it even better than the one poor Windows users are stuck with.

Check out the following Mac-only features:

- **DRAG AND DROP INSTALL**—Office 4.2 came with a stack of more than 30 carpal-tune-inducing floppy disks that were needed to install the program. In Office 98 you just pop in a CD-ROM, drag the Office 98 folder onto your hard drive, and you're good to go. Wherever you want to. Today.

BEFORE



- **SELF-REPAIRING APPLICATIONS**—One thing everyone hates about Microsoft Office is that it installs about 8 million mysterious files and libraries

into your System Folder. In previous versions of Office you couldn't throw one of them away for fear it would put the whole program out of commission. In Office 98, however, if you go on a fatal cleaning spree and trash important libraries and files, the program automatically repairs itself—you never know there's a problem. You can even change the name of your hard drive without hosing your whole machine.



- **OS 8 LOOK AND FEEL**—Microsoft worked closely with Apple to dress up Office 98 in its latest OS 8 outerwear—right down to matching shades of gray and Mac-like menu options. For example, it got rid of the term *Options* and replaced it with *Preferences*, which Mac lovers much prefer.

- **MAX, THE OFFICE ASSISTANT**—Office 98 lets you ask for help through a warm and fuzzy set of assistants that range from robots to Shakespeare, but only Mac users get Max.



- **CONTEXTUAL THESAURUS**—If you're constantly stumped for synonyms, you'll appreciate the contextual menu thesaurus, which lets you replace drab words with lively alternatives automatically, immediately, and on the spot.

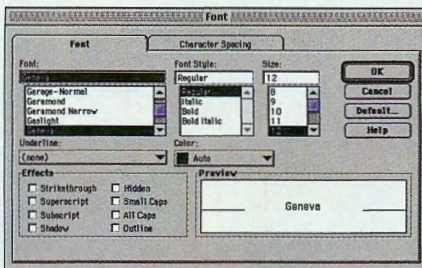
- **APPLE TECHNOLOGY SUPPORT**—Office now offers built-in support of QuickTime and QuickTime VR, which lets you import movies directly into any Office document. Office also supports Macintosh drag and drop.

4

THE FONT MENU

Microsoft really ticked off Mac purists when it took away the Font menu in Office 4.2 and forced people either to use the toolbar or search through the Format menu to switch between fonts. Who needs the hassle? Not you, anymore—the Font menu is back! And it's WYSIWYG! Although Office 98 still lets you fiddle with font sizes, styles, and such through the dialog box under the Format menu, the returned Font menu fills a void in all our hearts. Yes, Virginia, there is a Santa Claus.

BEFORE



THE FONT MENU was stolen in Office 4.2, but it was returned in even better condition—WYSIWYG.

AFTER



office

5

PRINTING IN EXCEL

Microsoft researchers did their homework and found that 95 percent of Excel users print their documents, making Print the fifth most commonly used command, following File Open, Copy, Save, and Paste. To make this task easier (and save a lot of trees) Office 98 lets Excel users decide just what data they want printed on each page. You can see where the page breaks and the page numbers fall on your spreadsheet by checking out Page Break Preview from the View menu. To customize your print job you just drag and drop page breaks and print borders to where you need them on the page—Excel performs the necessary tucks and reductions to make it all fit.

	Cost	Units	Cost Per Unit
1	100	200	0.5
2	200	400	0.5
3	300	600	0.5
4	400	800	0.5
5	500	1000	0.5
6	600	1200	0.5
7	700	1400	0.5
8	800	1600	0.5
9	900	1800	0.5
10	1000	2000	0.5
11	1100	2200	0.5
12	1200	2400	0.5
13	1300	2600	0.5
14	1400	2800	0.5
15	1500	3000	0.5
16	1600	3200	0.5
17	1700	3400	0.5
18	1800	3600	0.5
19	1900	3800	0.5
20	2000	4000	0.5

YOU COULDN'T do this in Office 4.2!!

TIDBITS

- IN THE LAST VERSION OF WORD, the word *Internet* wasn't even in the spell checker.
- THE RANGE OF DATES that Microsoft Excel can handle has been extended to Dec. 31, 9999 (formerly Dec. 31, 2079).
- IN EXCEL, THE NUMBER OF CHARACTERS allowed per cell has jumped from 255 to 32,767, and the number of rows allowed has increased from 16,384 to 65,535.
- WORD 98 CAN READ AND SAVE to Word 6, but anyone working in Word 6 who wants to read a Word 98 document will have to install an import converter (<http://www.microsoft.com/macoffice/>).
- MICROSOFT OFFICE 98 IS COMPLETELY compatible with Microsoft Office 97 for Windows.

6

OFFICE ASSISTANT

In Office 4.2, if you had a question (and with all the cruddy new interface changes, people had a lot of questions) you had to go through the Help menu to call up a dialog box where you'd type in a keyword to call up a potentially helpful (potentially not) index of topics. With a lucky shamrock and lots of time, you might work your way through the maze to find some answers for your troubles.

In Office 98, your help comes in the form of a friendly animated assistant that lives in a little box on your screen. If you have a question you click on the box and type in your

question in your own words—no need for geek speak or cryptic code words. Ask a question such as "How do I turn my Word document into a Web page?" and the assistant offers to take you to a variety of help topics on the program's Web capabilities.

The assistant doesn't always wait for you to come crawling for help to dole out useful advice. If you're taking the long way around a project, your assistant pipes up with shortcuts you may not have known existed. For example, as soon as you start writing a letter, the assistant recommends the Letter Wizard—a new feature that makes letter writing as easy as filling in the blanks. Although we hate to admit it, the assistant has quickly become one of our most valuable employees.

What would you like to do?

- Troubleshoot drawing objects
- Working with styles on Web pages
- Create a custom HTML template
- Learn about bullets and numbering on Web pages
- The differences between Word and Microsoft FrontPage for Web authoring

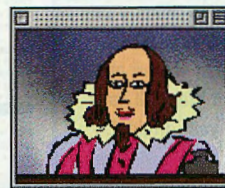
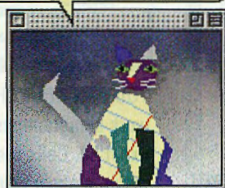
See more...

Do you like your peanut butter smooth or chunky?

Search

Tips Options Close

THE OLD PLAIN-JANE HELP MENU flashes with new personalities in Office 98. Ask anything you want, but don't get too intimate—if your question doesn't pertain to the Office, your assistant can't help you.



MORE
TIDBITS

- FOR DIEHARDS WHO INSIST that Word 5.1 is as good as word processing is going to get, Office 98 includes Word 5.1 menu and toolbar options. Fans of 5.1 can use the old commands to access all the new functions.
- IF YOU'VE NEVER OWNED YOUR OWN OFFICE, Office 98 will cost you \$499 (SRP); upgraders have to shell out \$299.
- OFFICE 98 IS FOR POWER MACS ONLY. Power Macs with a lot of RAM, that is. It takes 16MB of RAM to run each application individually, and even more if you want to run more than one app at a time. Microsoft suggests having 32MB of RAM and up to 120MB of free hard disk space for custom installs. Ouch.



7 GRAMMAR AND SPELL CHECKING

If your mother (or ex-managing editor) still corrects you when you confuse your correlatives with your expletives, then chances are good you'll appreciate the improved grammar and spell checking capabilities in all the new Office apps. Slip up grammatically and the offending word is underlined with a green squiggly line; spell a word wrong and you get a red squiggly instead. (Relax: If this function bugs you, you can turn it off.) In other news, the improved spell checker no longer wastes

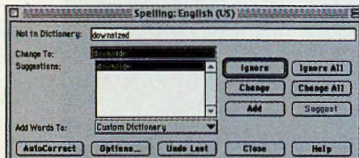
your time identifying every URL as a misspelling. In fact, the program's dictionary has been updated to include more words, common Fortune 1,000 companies, computer terms, and updated economic and industrial terminology. Now when you get a memo saying you've been *downsized*, the word will assuredly be spelled correctly. We know you're relieved.

Commonly Confused Words

Check the meaning of the marked word to be sure you are using the word correctly. Words that sound alike are often confused with one another. For additional examples, consult the Help menu under "commonly confused."

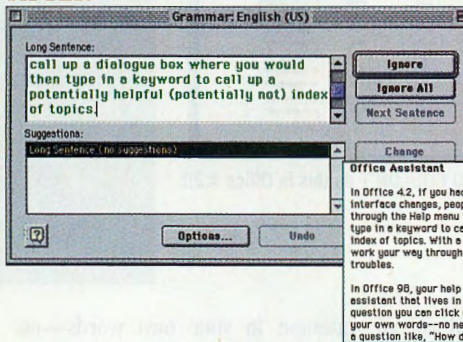
- Instead of: Its a long way to the station.
• Consider: It's a long way to the station.
- Instead of: The cat drank it's milk.
• Consider: The cat drank its milk.
- Instead of: Your going to like this.
• Consider: You're going to like this.
- Instead of: Your improving every day.
• Consider: You're improving every day.

BEFORE



THE SPELL-CHECKER in Word 6 is woefully out of date. It thinks *Internet* should be *internment*. Grim.

AFTER



WORD 98 DYED ITS GRAYS and updated its books. An improved dictionary means the spelling cops will stop you less often for crimes you didn't commit.

The new grammar checker doesn't just slap your wrist—it lets you know exactly why you were bad.



8 SHARING

Although Microsoft is more famous for *acquiring* things than *sharing* them, Office 98 promotes the free give and take of ideas with two separate but similar features. Versions (found under the File menu) in Word 98 saves each version of an edited document in

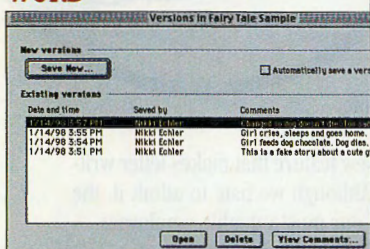
the same file. For example, if you don't like Sue's edits you can easily travel back in time to retrieve your original version of the story, without ever leaving that file.

Excel 98 offers users a long-awaited feature called Shared Workbooks (available in Excel 97 for Windows), which makes it possible for a number of people to make changes

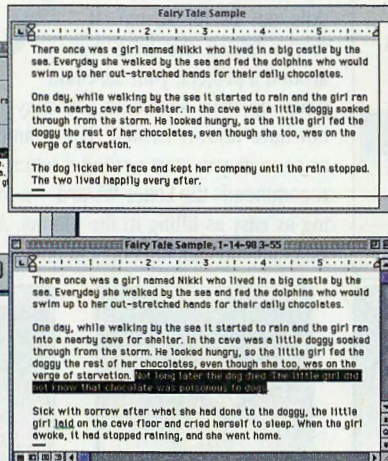
to the same spreadsheet simultaneously over a network, whether they're using Macs or PCs. Color-coded cells and annotations clue you in to who's doctoring which books and by how much.



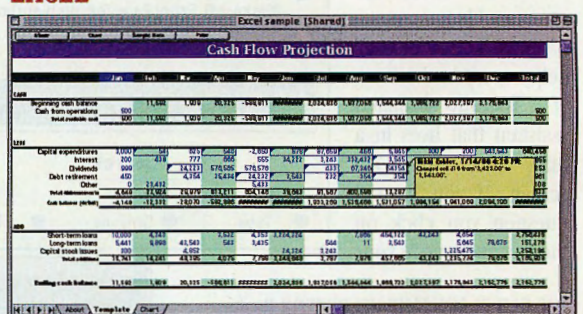
WORD



PICK YOUR VERSION, any version. Double-click on the version of your article you want to read, and Word 98 calls it up and compares it to your original.



EXCEL



YOU CAN CRUNCH your numbers even faster when several people work simultaneously on a spreadsheet using Shared Workbooks in Excel 98. Cells are highlighted with different colors and tagged with notes to show you who's making which changes.



AUTOMATION

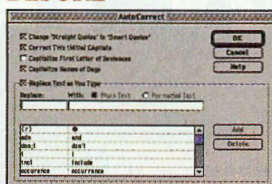
Office 98 may not take your place at the office, but it will probably make your life a lot easier while you're there, with the following new and improved automation features.

AutoSummarize scans your document, picks out keywords, and writes a rough summary of what it's all about. Although it can be eerily accurate, we don't advise handing it out unedited at a high-level meeting, and we certainly hope people will still read the whole document anyway.

AutoFormat formats your documents as you type, sensing what you plan to do next based on what you've already done. For example, if you're creating an indented, numbered list, the program picks up on that and does the indenting and numbering for you. It also automatically converts Web and email addresses to hyperlinks. Click on an email address and your default email client launches, springing open a new message with the address ready and waiting in the Send field.

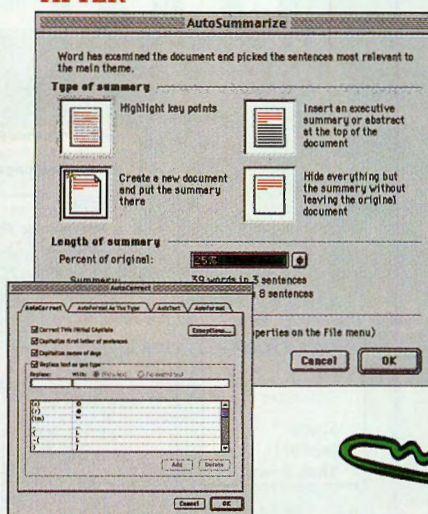
AutoCorrect existed in the previous version of Office, but now it catches and corrects even more misspellings and both single- and multiple-word grammar errors.

BEFORE



MORE! MORE! MORE! Designers enlarged Word's automated features to work harder and smarter. Not only does the updated AutoCorrect dialog box offer more tabs full of options, er, we mean preferences, but you can even set exceptions to what was once the rule.

AFTER

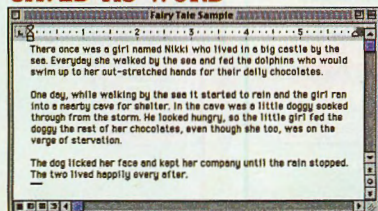


10

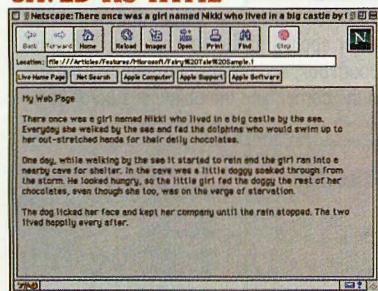
SAVE AS HTML

Back when Office 4.2 first shipped, the Internet was hardly the mainstream info mall that it is today. To catch up with the times, Microsoft designed

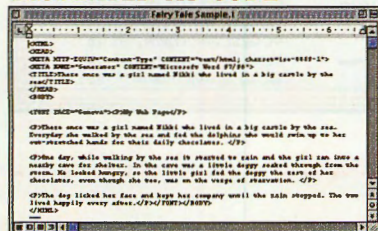
SAVED AS WORD



SAVED AS HTML



DISPLAYED AS CODE



Office 98 to enable you to save your documents and spreadsheets as HTML simply by choosing the Save As HTML command from the File menu. Nondesigners looking to break onto the Web also can take advantage of the program's Web Page Wizard for templates to common page styles. Once you've got the format down, you can import graphics, insert movies, pump up the jams via sound files, and animate your text through the Animation tab in the Font dialog.

Senior editor Nikki Echler was in no way bought off, brainwashed, or bullied by the Evil Empire at any time during the production of this article. So don't even suggest it.

LAZY WEBMASTERS and **HTML newcomers** alike can make any Office document Web-ready simply by saving it as HTML. If you want to check the code for cracks you can peek at all the tags by selecting **HTML Source** from the View menu.

TIPS FROM THE PROS

In the biggest peacetime goodwill gesture since the Fleetwood Mac reunion tour, several MacAddict editors temporarily checked their attitudes at the airport and flew out to visit Microsoft's Mac folks on their home campus. After seven hours of sipping Microsoft coffee and meeting and greeting a parade of Office engineers in the same chilly Microsoft meeting room, we came away with a lot more than just swollen bladders and new friends. If you want to make Office bend to your will, check out these manipulation tips from the masters.

EXCEL: To quickly add a row in Excel, try Option-clicking.

OFFICE: To watch your Office Assistant perform useless, yet subtly entertaining, animations, Control-click on it. Again. And again.

OFFICE: If you hate the ruler (as one Microsoft engineer does), you can hide it and then bring it back temporarily by hovering your mouse on the gray area just below the title bar.

OFFICE: Feel free to make messes and leave them—the program will fix them for you if you can fight the temptation to hit Delete and do it yourself.

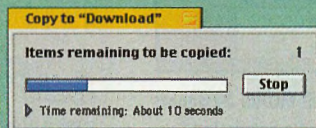
OFFICE: IS managers who want to pretend it's 1984 all over again can create a customized Installer folder to distribute companywide.

WORD: When you're working in Word, you can browse your document by graphics, headings, edits, tables, and more, simply by clicking on the circular symbol in the corner of the right-hand scroll bar.

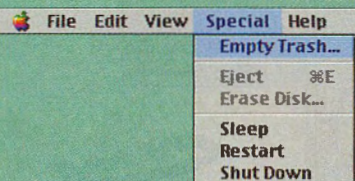
OFFICE: To save yourself all kinds of time, customize your toolbar so that it contains all the tools you use most often and none of the tools you never touch.

OFFICE: Control-click. Contextual menus will save you time and money. Well, they'll at least save you time. If you've got 'em, use 'em.

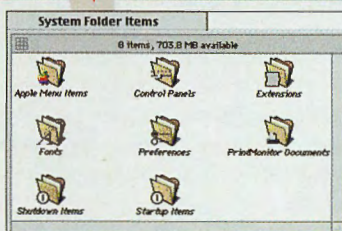
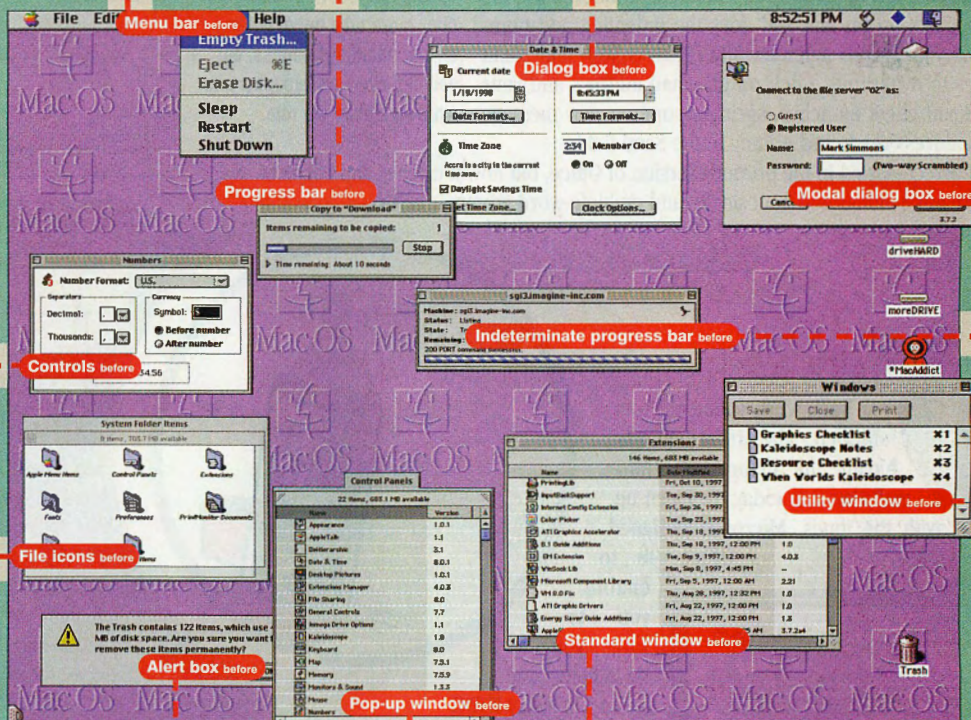
WHEN WORLDS...



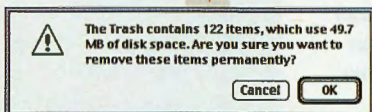
Progress bar after You can tart up these progress indicators with Kaleidoscope's interface magic. This one is a "determinate" progress bar, which extends gradually toward a clear goal.



Menu bar after Kaleidoscope lets you change the colors of the menu bar and its menus, not to mention the highlight you use when you select menu items. You can also change the Apple menu icon.

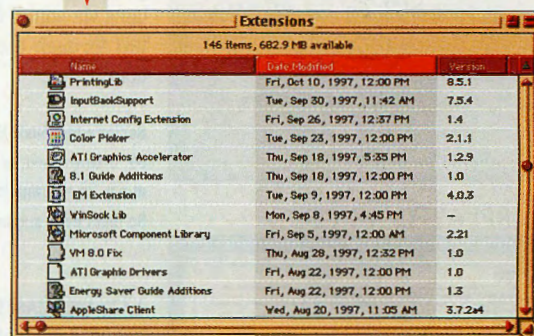


File icons after You can replace any standard file, folder, and extension icons with icon families of your own creation.



Alert box after Alert boxes are pretty much identical to dialog boxes, but they always have a warning icon. They're classified as "stop," "note," or "caution" alert boxes, depending on the icon.

Standard window after This is a standard window with an enclosing frame. Kaleidoscope's makeover applies to the title bar (and the close box, zoom box, and collapse box therein), the size box in the corner, and the ubiquitous scroll bars.

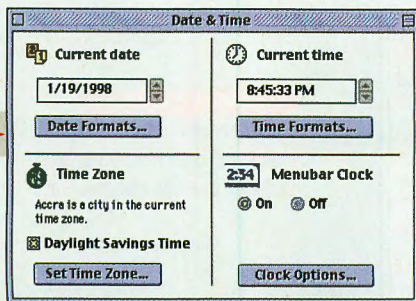


KALEIDOSCOPE

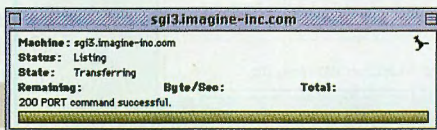
The possibilities are boggling!

schemes

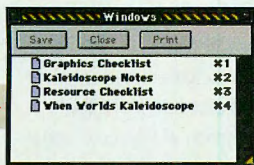
By Mark Simmons



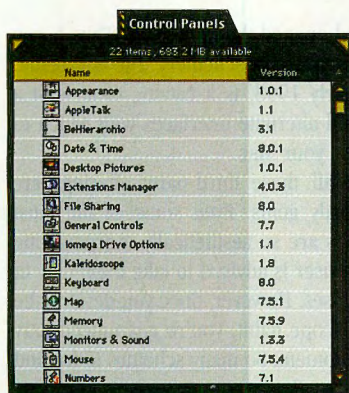
Dialog box after These come in three varieties—modeless (with a document window frame), movable modal (with a title bar), and modal (no title bar). This control panel uses a modeless dialog box and showcases some replacement push buttons and checkboxes.



Indeterminate progress bar after Indeterminate progress bars cycle in place to create a barber-pole effect. Kaleidoscope martyrs can create tinted versions for each accent color.



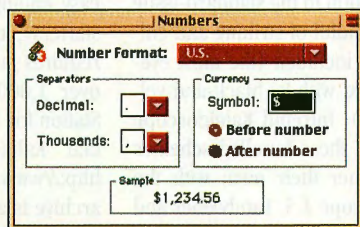
Utility window after These are little floating palettes that display information, provide easy access to tools and settings, and otherwise clutter up the screen. They come in both vertical and horizontal flavors and have pretty “drag region” patterns.



Pop-up window after Mac OS 8's pop-up Finder windows are a kick to customize. Other interface elements of note: the info-packed Finder header and the “bevel buttons,” which set the list view's sort order.



Modal dialog box after Another variety of the dialog box. In an inversion of the System 7 orthodoxy, modeless windows now have frames and modal ones don't. It's a wonder we don't all go funny in the head.



Controls after This dialog box is equipped with pop-up menus, the new hybridized pop-up menu button, and radio buttons. These are just a few of the controls subject to Kaleidoscope customization.

Jeepers creepers, where'd you get those scroll bars? Why do all your menus sport blood-red text on a black background? And how come the title bars of every window are decked with glossy jewels and metallic trim? Could it be that you're running that runaway-hit shareware utility Kaleidoscope?

Sure, it's nice that this friendly, little control panel lets you apply a magical makeover to the plain-vanilla Mac interface. And many happy hours of decoration and redecoration await those bitten by the Kaleidoscope bug. But the real reason this wonder widget has become a cult phenomenon is that, with a modicum of pixel-picking hackery, you can design your own lurid new look and share it with the world. Here's how!

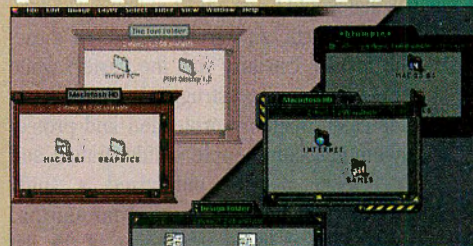


LOOK FOR Kaleidoscope, a slew of schemes, and all mentioned utilities on The Disc.



LOOK FOR more links and resources at <http://www.macaddict.com/issues>

NEW KALEIDOSCOPE PREVIEW



Schemers of the world, rejoice! Your imaginations will run wild with Kaleidoscope 2.0, coming soon from the trippy trio of Landweber, Voas, and Rose. This new version will be able to replace every one of Mac OS 8's controls, from disclosure triangles to sliders. Windows, buttons, and dialogs are created with single icon resources, which you can reshape and resize as you please. For a glimpse of this limitless design flexibility, witness these brand-new demonstration schemes, code-named Gaijin and Mekong. Tune in next month for a more in-depth look at Kaleidoscope 2.0.

Know Your Control Panel

Here's a quick tour of the Kaleidoscope control panel. As of version 1.8, you can select color schemes by double-clicking on them in the Finder, but it's still nice to visit the old control panel every once in a while.

Credits

Click here for more info on your scheme du jour.

Registration button

C'mon, it's only 20 bucks.

Help

Some handy documentation.

Play WindowShade Sounds

Like Apple's Appearance control panel, Kaleidoscope lets you silence those "whoosh" sound effects.

Use Classic Check Boxes

They changed 'em from Xs to check marks in Mac OS 8. Now Luddites can change them back.

Use Finder Zoom Rectangles

Why waste precious nanoseconds watching folder-window outlines zoom open? Or, if you must, you can use Kaleidoscope's faster zoom effect.

Substitute System Font

We're getting used to Charcoal, but suit yourself. Kaleidoscope includes some alternate fonts, including an adaptation of Apple's Espy font, a tidied-up version of Charcoal, and a Tekton knockoff.

Colorize Finder Windows

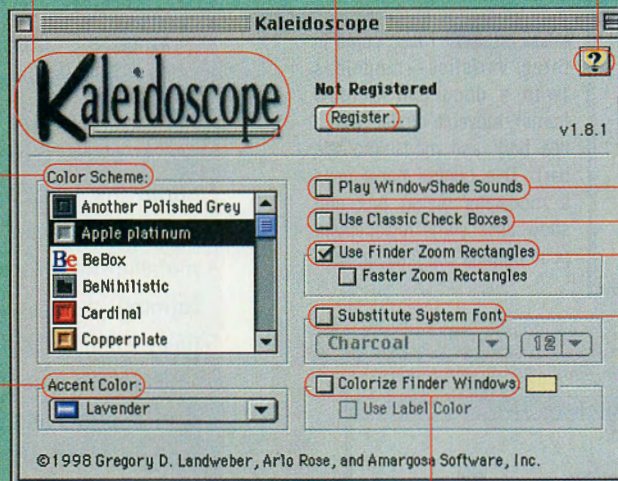
Change those dreary grays to something sunnier and brighten up your list views. Kaleidoscope includes some suggested colors for your sampling pleasure. The option of using the folder's label color is currently defunct.

Color Scheme list

These are the schemes in the Kaleidoscope Color Schemes folder within your Extensions folder. Schemes you open from the Finder are listed in italics.

Accent Color

Like Apple's Appearance control panel, Kaleidoscope lets you select one of 18 highlight colors (excluding black and white). Depending on the selected scheme, this may not have any effect.



Lucy in the sky with scroll bars

...we wandered, crying, in the wilderness of flat, uninspiring title bars and monochrome menus...

Once upon a time there was an Apple software project known as Copland, a grand makeover of the hoary Mac OS that would bring a host of improvements, both cosmetic and architectural. Of these, the former category was the easier; while Apple's engineers struggled endlessly to implement memory protection and protective multitasking, Apple swiftly drafted and publicized a spiffy three-dimensional makeover of the flat System 7 interface. It was then left to torment us as Copland's ship date continued to recede. So we wandered, crying, in the wilderness of flat, uninspiring title bars and monochrome menus, until shareware developer Greg Landweber hearkened to our pleas and brought forth the utility known as Aaron

(Aaron... Copland... get it?), which produced a lifelike simulation of Apple's long-awaited Copland interface.

Then, late in 1996, just as the Copland project was being laid to rest, word came of a new utility from Landweber and his co-conspirators Edward Voas and Fred Bass (Bass has since been replaced by former Apple human-interface honcho Arlo Rose). Dubbed Kaleidoscope, this new utility went Aaron one better by letting us switch between alternate interfaces ("color schemes," in Kaleidoscope parlance), much like Copland's promised appearance-switching feature. In addition to the standard-issue Copland look, a handful of striking and colorful variants were included (the most eye-catching being Onyx, with its black-and-yellow hazard stripes). Intrepid Kaleidoscope fans soon dissected these bundled schemes and cobbled together their own; with the release of Kaleidoscope 1.5, Landweber and friends drew up complete documentation of the hitherto-mysterious color scheme for-

mat and opened the floodgates. Thus began the golden age of schemery. The end result, circa early 1998, is a catalog of at least a thousand alternate interfaces with which to decorate your Mac.

Not all these third-party offerings are necessarily gems. Even some of the most gorgeous are so aesthetically overpowering that the user is advised to take them only in small doses. However, once you develop the Kaleidoscope habit, you're guaranteed nary a dull moment. So many schemes to try, and so little time!

While the basic Kaleidoscope software is easy enough to find (it's on The Disc, for starters), questing for new color schemes requires a bit more legwork—there are over 1,000 out there. The Grand Central Station for Kaleidoscope schemes is the official Kaleidoscope Scheme Archive at <http://www.kaleidoscope.net/schemes>; this archive is available on CD-ROM, courtesy of SiteLink. Go to <http://www.macaddict.com/issues> for more scheme sources.

I scheme, you scheme, we all scheme

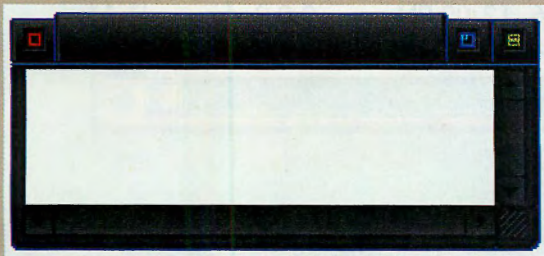
Once the thrill of the hunt begins to wear off, or you develop a hankering for a certain combination of colors and interface elements that no scheme developer has seen fit to assemble, then perhaps you're ready to begin the next phase of your Kaleidoscopic odyssey—the creation of your own color schemes!

You stand now on the threshold of a great adventure. Take a moment to savor it, then plunge in.

First, let's break out our old friend ResEdit (which you can find on The Disc).

Where Are They Now?

With the arrival of Mac OS 8 last summer, the newfangled Platinum Appearance originally developed for Copland is no longer the exclusive province of Kaleidoscope users. In fact, Mac OS 8's Platinum Appearance is just the tip of the iceberg, as it lays the groundwork for the full suite of appearance-switching features once promised for Copland; look for these interface-manipulation gimmicks to emerge in future Mac OS releases. For this reason, Apple has requested that the major Kaleidoscope color-scheme archives not include simulations of the much-publicized High-Tech and Kids interface designs, as it still has plans for them. In the meantime, let the Kaleidoscoping continue!



APPLE'S HIGH-TECH INTERFACE is reminiscent of pricey personal electronics.



KIDS, ALSO KNOWN AS GIZMO, is a wacky design for the young at heart.

Up until a few months ago, there was no way to create schemes without resorting to grueling pixel-shifting in a resource editor. As you'll see shortly, there's now a better tool for most of these chores, but there are a few things that still require old-fashioned resource editing. All in all, you're much better off knowing how all this works at the gritty resource level. You'll thank me later.

When you select a color scheme, Kaleidoscope assembles the dozens of interface fragments stored in the scheme file to produce the jazzy widgets and gadgets you see on your screen. From the mighty menu bar and the voluminous window, to the humble close box and the teensy arrows at each end of the scroll bar, every interface element must be designed by the scheme's architect. Even standard controls such as push buttons, radio buttons, and check boxes are subject to Kaleidoscope's overweening dominion.

Just to make things extra tough, many of these interface fragments must be designed in multiple flavors—a radio button, for instance, can be on, off, or in a “mixed” state, and each of these may be either disabled, pressed, or just sit there happily. That's nine varieties of radio button, just for starters. All told, a bare-bones Kaleidoscope scheme consists of over a hundred resources—see our “Resource

Checklist” page at the *MacAddict* Web site (<http://www.macaddict.com/issues>) for details.

Daunted? You probably should be. The first time around, you'll end up spending hours chasing down misplaced resources, checking to see whether the black-and-white versions of your scroll arrows are in sync with the 8-bit color ones, and wondering why you need disabled versions of all these darn widgets any-

way. But when you put the whole thing together, and you see your dream buttons cavorting in your handcrafted dialogs with your very own, personally tuned progress bars, you'll know the ordeal was worth it—unless your scheme is just awful, but even then it's a learning experience.

Fortunately, the days of pure resource editing are now behind us. But before we turn the page and embrace the wondrous cop-outs afforded us by the relentless march

of technology, let me just offer you a few useful tips for the down-and-dirty resource work.

■ **When in doubt, swipe.** I don't mean that you should copy and paste resources from other scheme files, change a pixel here and a fill color there, and then put your Frankenscheme into circulation. Rather, I suggest you copy the necessary resources from a venerable elder scheme and then

rework each resource in turn until it bears the stamp of your own creative genius. We hereby give you explicit dispensation to heist resources from the *DeadLine* and *MacAddict98* schemes included on The Disc, which should provide 100 percent of the U.S. RDA of color scheme resources. Just make sure you change every pixel, y'hear?

■ **Don't forget the nagging details.** After the glamorous work of designing killer scroll bars and check boxes is over, there's still the chore of designing a credits dialog, checking the *vers* and *Colr* resources, and making sure you've drawn a disabled version of everything that needs it.

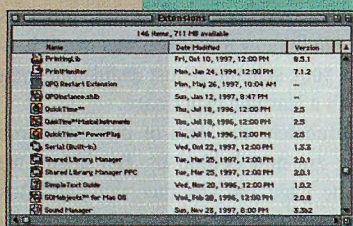
■ **Check your work.** Sven Berg Ryen's free SchemeChecker (<http://www.geocities.com/siliconvalley/pines/9346/scinfo.html>) runs a set of tests on your completed scheme, making sure you haven't omitted any vital resources or set any resource flags incorrectly. You wouldn't submit a file to a shareware library without virus-checking it first, would you? Well, don't send your scheme out into the world without first running it through SchemeChecker.

And never, ever, ever edit the currently active scheme file. I confess that I cut corners every once in a while as I worked on this article, but just look how I turned out. Learn from my tragic example.

Stupid Kaleidoscope Tricks

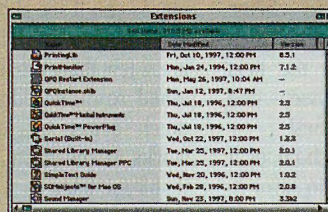
The work of other talented artists is ever a source of inspiration. Take a look at the nifty effects employed in these stylin' schemes, and see if you can come up with some of your own.

schemes



Younameit IV by M.C. Amons

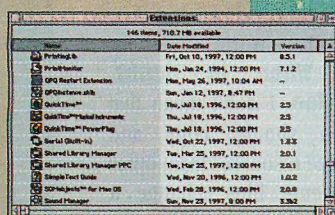
Dig those free-floating scroll controls! To make borderless scroll arrows and boxes look good, make the pressed version of the scroll bar background the same as the unpressed.



Light Alloy

by Ric Zito

Demonstrating that your horizontal and vertical scroll bars don't really have to look anything alike.



Diner

by Patricia Lillie

Here's another integrated pattern. This requires clever juggling of icon masks and pattern resources—Designer's Studio is a real boon for this kind of tweaking.



Tech Guts

by Joshua Belland

It's a disturbing pattern, but isn't it interesting to see all the places you can work in patterns and textures? Menus, title bars, and scroll bars can all be filled with textures instead of flat color.

Scrollites Wing

by Layne Karkruff

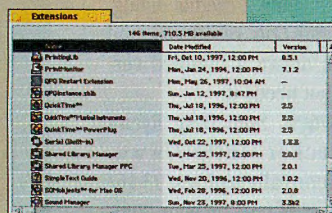
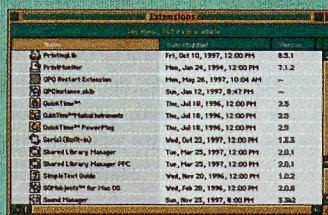
Look at that scroll bar morph! Pressing an interface element can be an adventure in and of itself. Bear in mind that scroll boxes, unlike some other elements, can be as big as you like.



Copperplate

by Brian Hagler

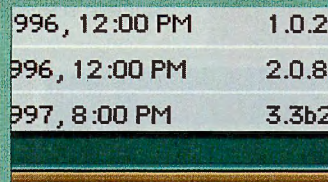
Nice feedback with these scroll arrows—when you click them, they seem to leap forward in anticipation. Think of the pressed versions of interface elements as a chance to delight the user, not as some dismal obligation.



Be Scheme

by Greg Landweber

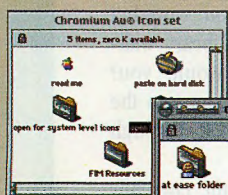
A Landweber original, using a custom WDEF resource to mimic the distinctive look of the BeOS. Unlike the resource hackery of conventional scheme creation, writing WDEFs is a task for professional programmers.



Lounge Lizard

by Patricia Lillie

Another full-service package, with a selection of matching desktop and utility patterns for a complete thematic makeover.



Chromium Au

by Jonah Greene and Duane King

An amazingly comprehensive set of icons. It almost seems as if the scheme is just along for the ride.



Graphical content advisory

Even for the most meticulous of pixel-pushers, creating color schemes in a resource editor leaves something to be desired. Not only are you unable to see how your discrete interface elements mesh until you save your work and load the (possibly quite hideous) scheme, you'll probably never be able to keep track of all the stretched icon resources. Quite literally, a single misplaced pixel can erase the names from every window or draw a thick black line across the menu bar.

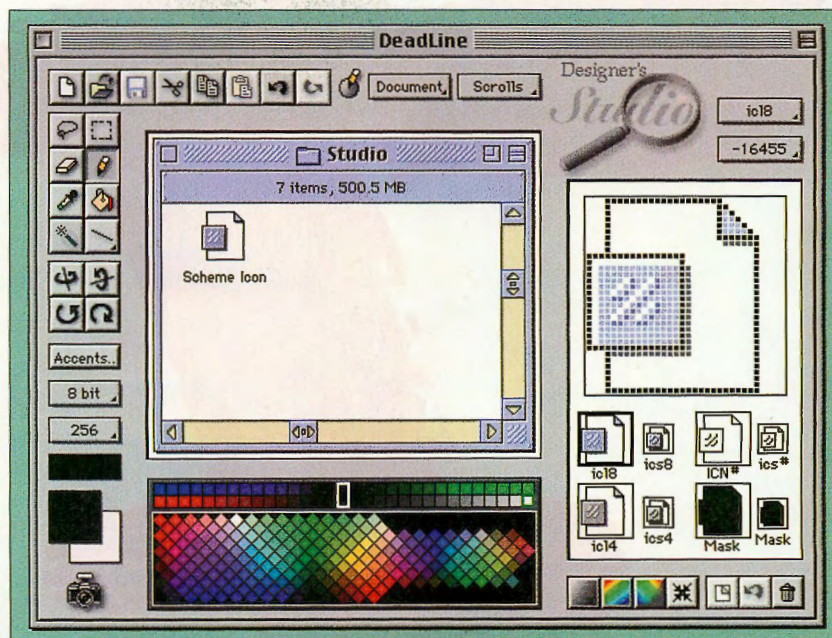
■ Here's an example of a stretched icon. In this *cicn* resource, a few key pixels (in red) control almost all the document window's contents; other pixels (in lurid green) are ignored entirely.

Clearly, there was a void to be filled. Now, Akamai Design's shareware Designer's Studio has stepped in to fill it. This fully graphical Kaleidoscope color scheme editor lets you preview your interface makeover, click on any element to edit it, then see how your changes affect the overall design. It's also great for detail work, when you're fiddling with stray pixels and icon masks to get just the right effect where interface elements meet.

■ Designer's Studio crams almost every conceivable Kaleidoscope operation into a single window. Click on an interface element in the center, and edit it on the right. To the left, a full set of painting tools. On the upper right, pop-up menus that toggle between window types and individual resources.

While Designer's Studio provides the boon of live previews and the convenience of point-and-click editing, you're not entirely off the hook. You still need to edit each one of those hundred-plus resources. Stepping through each of Designer's Studio's screens, you'll encounter document windows, alert boxes, menus, scroll bars, radio buttons, progress bars, and all the rest of the Mac menagerie—and you must tame them all. Be particularly careful to click on every element, to make sure you get a chance to edit the pressed mode.

Designer's Studio comes in handy when dealing with stretched icon resources. Can you see how A turns into B? Didn't think so. Once you've made the rounds of Designer's



THE SINGLE-WINDOW INTERFACE of Designer's Studio lets you preview and edit nearly every interface element you can think of.

Studio, you'll need to return to the purgatory of ResEdit to attend to a few details that the graphical editor doesn't yet handle. (Now just watch Akamai Design go and add these features while this issue is at the printer.)

■ Kaleidoscope can extrapolate from other resources to dress up Mac OS 8's bevel buttons and pop-up windows, but for maximum customization, you may want to insert the appropriate *cicn* resources manually.

■ Then there's that credits dialog—surely an occasion for you to strut your stuff, and well worth the hassle of mastering ResEdit's clunky *DITL* editor (or, for that matter, springing for Resourcerer... but I digress). If you used Designer's Studio to do your heavy lifting, be a sport and include its "Created With" logo.

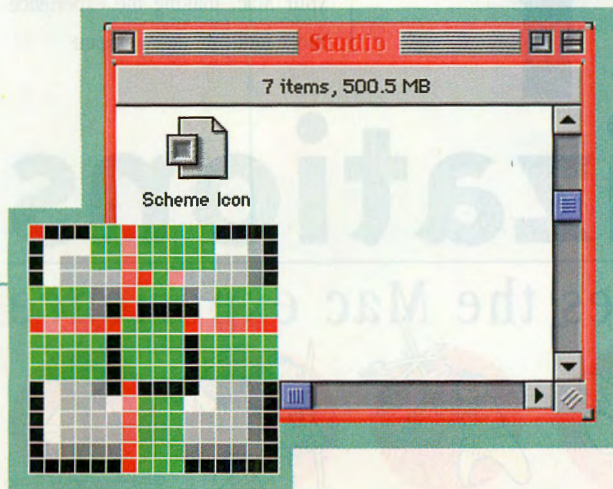
■ Last but not least, you'll surely want to take advantage of Kaleidoscope's magical power to override the standard selection of desktop icons. Make a copy of Apple's Appearance extension, pop it open with ResEdit, and take a look at all the file and folder icons stored within (each icon, of course, consists of the dual trinity of *ic18*, *ic14*, *ICN#*, *ics8*, *ics4*, and *ics#* resources). Now that you've lavished all this time and energy on building the interface of your dreams, how can you resist the opportunity to remake every icon on the desktop in your image by adding substitute resources to your newborn color scheme?

Congratulations. You are now a Kaleidoscope addict.

In 1993, Mark Simmons made icons. In 1995, he wrote AppleScripts. He has now discovered his *fin de siècle* calling.

A single misplaced pixel can erase the names from every window or draw a thick black line across the menu bar.

schemes





samurai

by Kevin M. Savetz



FIND THESE
utilities on
The Disc

Killer Customizations

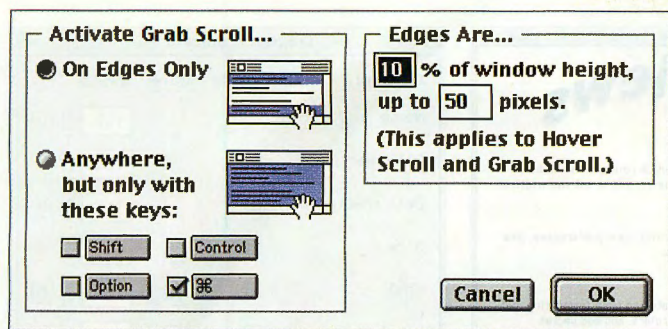
Shareware that fine-tunes the Mac experience



Remember the tale of the seven samurai as told in the 1954 movie classic *Shichinin No Samurai*? It's about a village, plagued by bandits and unable to buy weapons for defense, that appeals to a veteran samurai (down on his luck but with a good heart) for help. He agrees, and then, in turn, recruits six other samurai to help him save the townspeople in return for room and board.

So what does this have to do with the Mac? It's a zen connection, you understand. There's a certain allure to customizing the way your Mac works. Some Mac addicts don't have the resources to buy all the latest software, though. That's where the seven utilities come in. We've collected seven programs that will do work on your Mac in exchange for some space on your hard drive (and the appropriate shareware fee to the program's author).

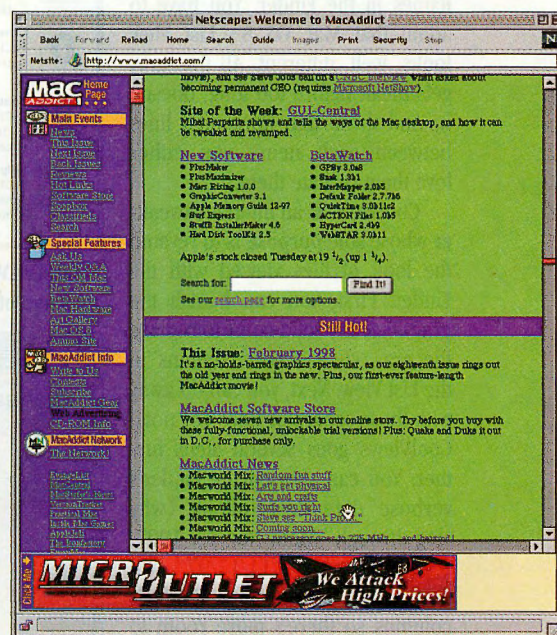
Some utilities strive to make the Mac's interface a little prettier or more convenient. A little tuning can go a long way. Other programs dig deeper, replacing chunks of the operating system with powerful counterparts. These can save you time and change the way you use your Mac, making the experience more intuitive, more elegant.



■ WHEN YOU OPEN the ScrollMagick control panel's options area, you'll be able to control just how ScrollMagick works—or doesn't work—its wonders.



■ THIS IS SCROLLMAGICK'S nerve center. Hover and Grab scrolling can be enabled and disabled here, help is available, and all those nagging controls lurk just under the surface.



■ NOTICE THE FUNKY little hand with the triangle on it near the bottom of the Web page? That's ScrollMagick scrolling the page away with nary a click.

ScrollMagick

Perhaps the only thing better than a tweaked-out scroll bar is not having to reach for the scroll bar at all. That's the gimmick of ScrollMagick, a \$10 add-on that will make you think twice before mousing over to that scroll bar. Using it, you can scroll up or down simply by pointing the cursor near the top or bottom of a window. You don't even have to implore your overworked fingers to click: just point to the window's edge and you'll be scrolling.

You might be dubious about the usefulness of this utility, but the effect is rather elegant—once you get used to it. The farther up or down you push the cursor, the faster the document will scroll.

ScrollMagick lets you control how much of the window is the scroll zone (although the default of 10 percent works nicely), or you can specify modifier keys to activate scrolling from anywhere in the window. ScrollMagick also lets you use a hand cursor to grab the contents of a window and drag them up and down.

Requires: System 7 or later
Cost: Shareware, \$10
Download: <http://www.edenware.com>
or find it on The Disc.



CoolViews

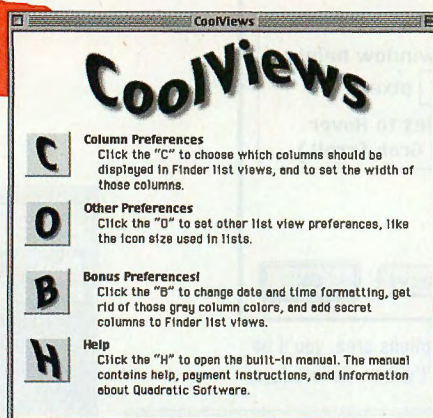
We all spend a fair share of our time staring at icons and file names in the Finder. You have to admit that Mac OS 8's List View looks, well, different. All that gray gets bleak before too long, doesn't it? And those thin horizontal lines between each item—you either love them or hate them.

CoolViews is an interface tweak-er whose sole purpose is to revamp the look of files viewed with the Finder. First, you can banish the gray. Pick any solid color to replace the gray, shaded sort columns in the List View. Next, you can do away with those separator lines (or not). CoolViews goes several steps further. You can shorten the Finder's verbose date descriptions (why slog through "Mon, Nov 17, 1997, 2:42 PM" when "11/17/97" will do?) and resize the Finder's columns so there's more room to see long file names.

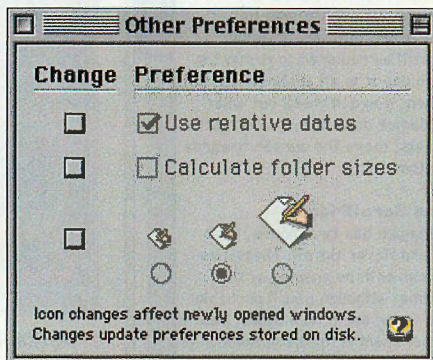
List View is the Finder's most information-packed setting. If you leave most of your Finder windows in List View most of the time, you can save both screen real estate and time by changing the column widths and information displayed to suit your needs. Developers and other nerds will appreciate CoolViews' ability to show files' type and creator information in List View.

CoolViews is \$20 shareware. Twenty clams is a small price to pay for the lift in your spirits that comes after stomping out the Finder's depressing gray exterior. Consider its other features a bonus.

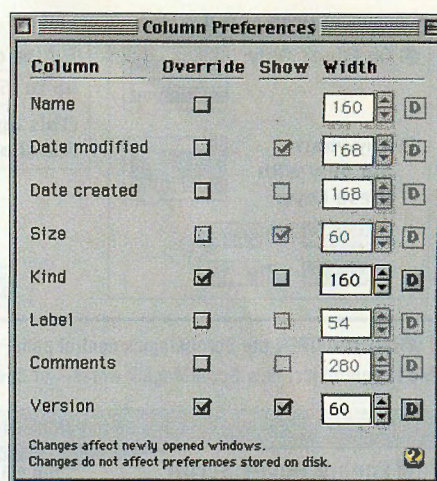
Requires: Mac OS 8
Cost: Shareware, \$20
Download: <http://www.quadratic.com/Cool>
 or find it on The Disc.



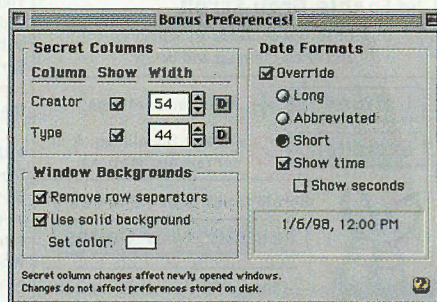
■ **COOLVIEWS IS A SIMPLE utility on the surface, but it has lots of depth hidden under those controls.**



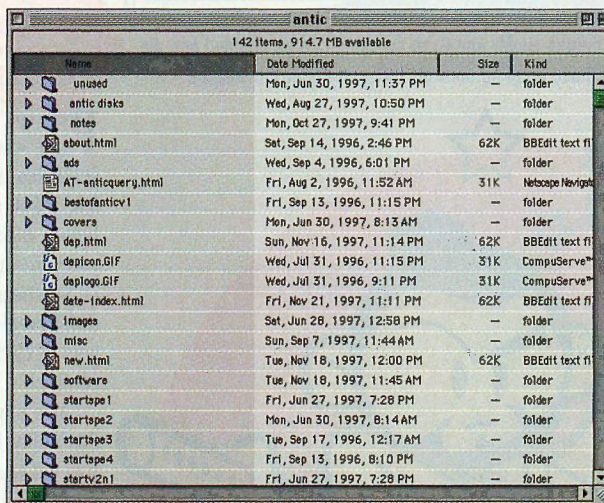
■ **COOLVIEWS ALSO LETS users control traditional List View preferences, such as icon sizes.**



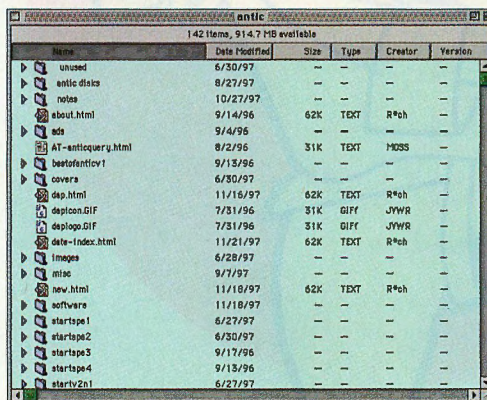
■ **FINALLY, USERS CAN CONTROL how wide individual columns appear with CoolViews.**



■ **BUT WAIT, that's not all! CoolViews lets you use short dates and show file types and creators.**



■ **BEFORE COOLVIEWS—You either love or hate the grays and lines that fill Mac OS 8's List View windows.**



■ **COOLVIEWS TAKES CARE of the lines and grays, making a soothing single-color background. The utility also adds some new column categories, and it lets users control column widths.**

DoubleScroll

DoubleScroll is a simple interface addition that will become a fast friend. This control panel doubles your pleasure every time you point your mouse at a scroll bar. DoubleScroll puts two arrows on each end of a scroll bar, so you can scroll up or down from either side of the bar. I see you suppressing that yawn, but stick with me. DoubleScroll's namesake feature isn't the best part: it also enables live scrolling in all applications. When you drag the scroll thumb—the little moving box in the scroll bar—the window scrolls in real time rather than jumping to the new position when you release the mouse button.

DoubleScroll also adds keyboard shortcuts for quickly getting around your documents. You can Command-click the up arrow to jump to the top of your spreadsheet, for instance. Option-clicking an arrow allows you to move up or down a page at a time—a lifesaver for PowerBook users missing

page-up and page-down keys. Shift-clicking on any point in the scroll bar lands you at that point in the document. If you frequently edit very long documents, you'll appreciate the utility's ability to crank up the scrolling speed to a blistering rate (or tone it down if you scroll past your intended destination all too often).

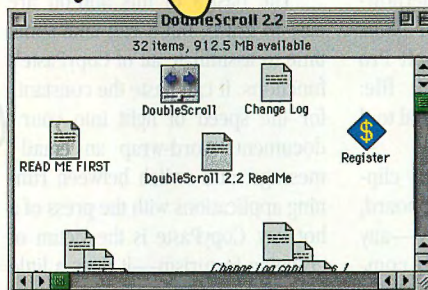
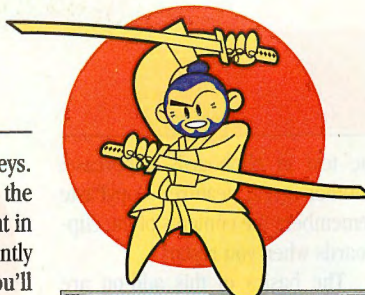
My only complaint about DoubleScroll is its Live Scrolling feature, which doesn't work flawlessly in all applications (for instance, Live Scrolling makes Nisus Writer jitter and twitch like an overcaffeinated DOS user). Happily, the control panel offers a filter so you can turn the feature off when using specific applications.

Requires: System 7 or later

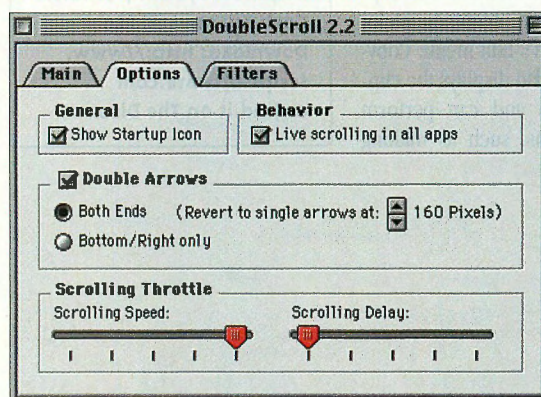
Cost: Shareware, \$10

Download:

<http://www.amargosa.com/doublescroll.html>
or find it on The Disc.



■ **NOPE, YOU'RE NOT seeing double.** There should be two scroll arrows at the end of each scroll bar.



■ **HERE'S WHERE USERS** can change how scroll arrows appear, and also exercise some control over the scrolling throttle.

DragThing

A good program launcher is a must-have utility. The alternative—a desktop or Apple menu littered with aliases—isn't a pretty sight. Apple's Launcher utility is a good start, but it's neither powerful nor flexible. Instead of using that, grab a copy of DragThing, one of the best launchers available.

DragThing presents a colorful dock that is home to any number of tabbed pages. For easy access to a program, document, or folder, just drag it onto an empty space on DragThing's dock. The next time you want to access that item, you will find it right where you left it on the dock; double-click its icon to open it. As the name implies, you can also drag and drop icons onto docked applications. For example, to open a text file in your word processor, you can drag the file to the word processor icon in DragThing.

You can feed DragThing URLs

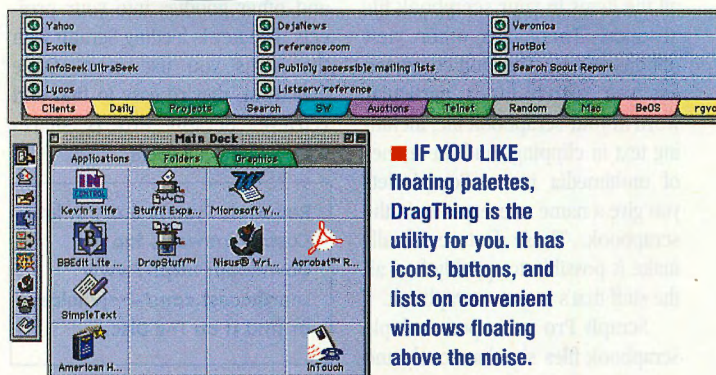
just as easily as you feed it Finder icons. Just drag a link from Netscape Navigator or Microsoft Internet Explorer to place a URL on the dock. You can group different types of sites on different pages, making DragThing an excellent tool for organizing URLs—certainly a whole lot easier than riffling through the enormous, unsorted list of bookmarks in your Web browser.

You can squeeze DragThing's dock down to a thumbnail with a click of the mouse, and keep the minimized dock floating on top of other application windows at all times so your frequently used files are always one click away.

Requires: System 7.5 or later

Cost: Shareware, \$15

Download: <http://www.dcs.gla.ac.uk/~james/dragthing.html>
or find it on The Disc.



■ **IF YOU LIKE** floating palettes, DragThing is the utility for you. It has icons, buttons, and lists on convenient windows floating above the noise.

CopyPaste

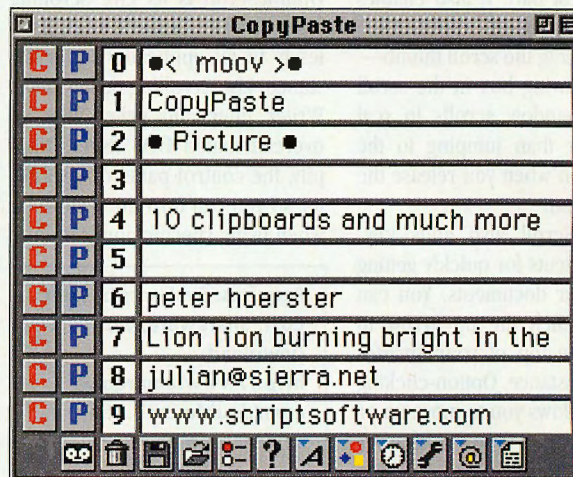
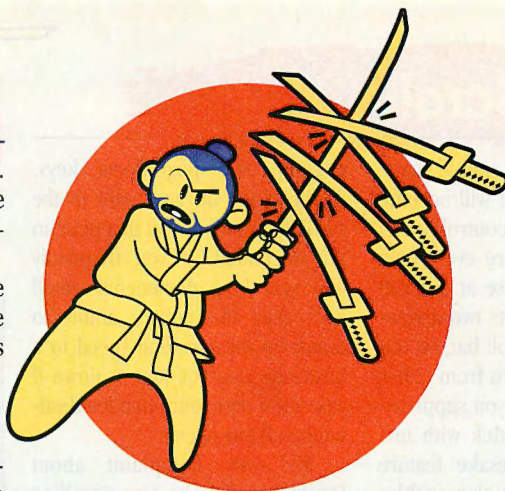
The Clipboard is an essential, invisible tool. You probably use it a dozen times a day without thinking twice about it. For all its utility, the Clipboard is underpowered. CopyPaste does for your Mac's Clipboard what ScrapIt Pro does for your scrapbook file: makes it beefy. It is an essential tool for power users.

CopyPaste serves up ten clipboards. To use a specific clipboard, type Command-C (or X or V—any of the regular Clipboard commands) followed by a number from 0 to 9. If you forget which one is which, you'll find a list of the clipboards and their contents under your application's Edit menu. CopyPaste's palette also displays the clipboard contents and can perform other operations, such as making

the text in clipboards uppercase. Another great feature: CopyPaste remembers the contents of the clipboards when you restart.

The basics of this add-on are easy to grasp, but it can take some time to assimilate all of CopyPaste's functions. It can paste the constant for the speed of light into your document, word-wrap an email message, and switch between running applications with the press of a hot key. CopyPaste is the victim of creeping featurism—it does a little too much.

Requires: System 7 or later
Cost: Shareware, \$20
Download: <http://www.scriptsoftware.com>
 or find it on The Disc.



■ **WHEN ONE CLIPBOARD** isn't enough, CopyPaste multiplies that paltry number by 10, and it tells users what's on each one.

ScrapIt Pro

There's no way to say it nicely: the Mac's Scrapbook sucks. It has barely changed since it made its first appearance under the Apple menu back in '84—it was novel then but simply hasn't kept up with the times. Throw it away. Download ScrapIt Pro. Trust me.

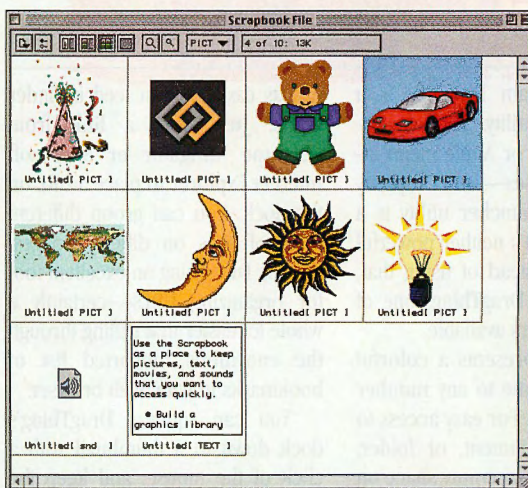
ScrapIt Pro is loaded with features, but it will take just two of them to win you over: Gallery View and Find. Gallery View lets you see all the items in your scrapbook file at once. There are other view options as well. The Find command lets you search for a particular word in your scrapbook file, including text in clippings and the names of multimedia items. ScrapIt lets you give a name to every item in the scrapbook. Those features finally make it possible to quickly find all the stuff that's in your scrapbook.

ScrapIt Pro can open multiple scrapbook files simultaneously and

store text; PICT, GIF, and JPG graphics; sound files; QuickTime movies; even QuickDraw 3-D objects. Paste them all in. Or drag them in, because ScrapIt is fully drag-and-drop compatible.

Finally having access to a decent scrapbook will change the way you work on your Mac—for the better, as you become accustomed to dropping oft-used graphics, boilerplate text, common HTML code, and other goodies into your projects. The key is feeding ScrapIt with the items you use most. Once they're in, they're easy to find and retrieve. ScrapIt Pro is shareware—\$20 well spent.

Requires: System 6.0.5 or later
Cost: Shareware, \$20
Download: <http://www.northcoast.com/~jvholder>
 or find it on The Disc.



■ **THE BUTTONS ACROSS** the top of ScrapIt Pro's window let users control files, views, and other aspects of the program.



Aaron Light

Years ago, I discovered Click-Change, a commercial program that could make all sorts of funky enhancements to the Mac's interface. Today, a popular shareware program called Kaleidoscope does similar tricks: you can use it to modify just about every aspect of your Mac's interface (see page 26 for more information about Kaleidoscope). I can't be trusted with such tools—after a series of questionable color choices, my poor Mac just ends up looking gaudy.

Besides, some of us don't want glitz. We don't want our Macs to look like a Kaleidoscope. We fell in love with the new look of Mac OS 8 and, frankly, can't understand why you'd want to mess with Apple's look of perfection. Aaron Light is an extension for purists. What it does, in the words of its creator, Gregory Landweber (perennial interface tweeker and developer of Kaleidoscope, Greg's Buttons, and other popular shareware), is "make Mac OS 8 look more like Mac OS 8."

This interface enhancement makes more apps conform to System 8's Platinum Appearance. The beauty of Aaron Light is that you might not notice it once it has been

installed. Its job as a little 56K extension is to beat into submission all the programs that don't work with Mac OS 8's Appearance Manager. It patches the progress bars, floating windows, dialog box backgrounds, and menu glitches in applications that haven't caught up with the times. Not being distracted by interface elements that don't quite mesh is one of life's simple pleasures. The final touch of Aaron Light's understated elegance is that it lets you use Epsi Sans Bold as the system font rather than blocky Chicago.

Using Aaron Light couldn't be simpler: toss it in the Extensions folder and forget about it. Its single option, the ability to replace Chicago with Epsi Sans Bold, doesn't even require a new control panel: if you pick Chicago from the Appearance control panel, Aaron will silently substitute Epsi. If you pick Charcoal, that's what you'll get.

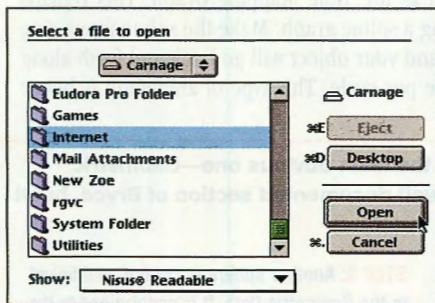
Requires: System 7 or later

Cost: Shareware, \$5

Download: <http://greg.math.harvard.edu>

or find it on The Disc.

■ **AARON LIGHT** is perhaps the most subtle of the Seven Utilities. It has no controls, and it doesn't do anything fancy. It's like BASF—Aaron Light doesn't make the Mac OS interface, it makes it more Mac-like.



And one for System 7.x



■ **FINDER OPTIONS** lets System 7.x users take advantage of a few of Mac OS 8's new features.

Finder Options

In every revision of the operating system, Apple adds enhancements to the Finder, then, inevitably, buries some of them. This little control panel represents Mac hacking at its finest, enabling those features that Apple has hidden from view. Sure, you can go into ResEdit and tweak the Finder by hand (and we considered telling you how), but it's a whole lot easier—and safer—to let this little utility do it for you. Finder Options is for Macs that are still using a version of System 7. Mac OS 8 users need not apply (primarily because many of the goodies it adds made it into the later version).

Finder Options enables several nice touches and will leave you wondering why Apple left them out. With it, Command-Delete moves an item to the Trash and Control-drag creates an alias of an icon. Later, when you can't find the original file that belongs to that alias, you'll notice that Finder Options has put a Reveal Original Item command under the File menu. (It does the same thing as the Reveal Original button in the Get Info box, but it's easier to find.) In addition, you can disable ZoomRects, which might be worth doing if you use a very slow Mac.

Requires: System 7.5.3 or later

Cost: Free

Download: <http://www.cstone.net/~rbraun/mac/finder>
or find it on The Disc.

Kevin Savetz (savetz@northcoast.com) is a computer technology writer based in Northern California. If you don't register your shareware, he will personally come to your house and bore you to tears with his collection of obsolete home computers, starting with the Apple III.



reviews

Iconoclastic, interactive, synergistic multimedia and other stuff

Bryce 3D

COMPANY: MetaCreations

CONTACT: 800-846-0111 or 408-430-4100, <http://www.metacreations.com>

PRICE: \$299 (SRP), \$99 upgrade

REQUIREMENTS: PowerPC (604e or G3-based Mac recommended), System 7.1 or later, 16MB of RAM (32MB or more devoted to Bryce recommended), 50MB of free hard disk space

Like its Utah namesake, Bryce just keeps getting deeper and deeper. The latest overhaul of MetaCreations' fantastic 3D landscape generation program, now inexplicably titled Bryce 3D (it's always been a 3D program), delivers surprisingly powerful—and long overdue—animation abilities. Combined with Bryce 3D's many other enhancements, animation makes this a must-have upgrade for previous Bryce users—especially those yearning to dig beneath the program's surface and uncover its secrets. In the process, Bryce has lost some of its simplicity and ease of use, but that's a small price to pay.

Like many other elements of Bryce, the new animation tools don't work quite like those in any other program. Bryce can now group and animate objects in an object hierarchy, as can just about any 3D app. You can animate any object, including skies, terrains, and textures, by creating keyframes at various points along the new animation timeline at the bottom of the main Bryce screen. Without



THE BASIC BRYCE INTERFACE hasn't changed much—except for the animation controls. This image was created using some of Bryce's new features, including Volumetric Textures and rainbow effects.

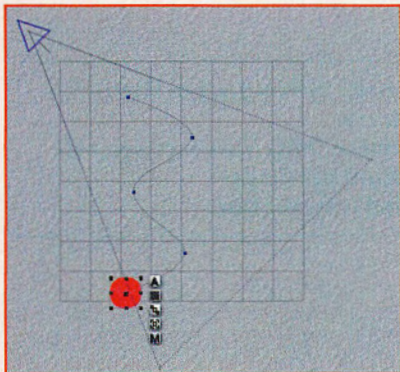
leaving the main screen, you can easily render out QuickTime movies of landscape flybys and other simple motions.

From here Bryce goes its own way with tools you just don't see elsewhere, such as the Time Mapping Graph. This remaps your keyframes along a spline graph. Make the spline into a sine wave, for instance, and your object will go back and forth along its motion path once per cycle. This type of animation is better

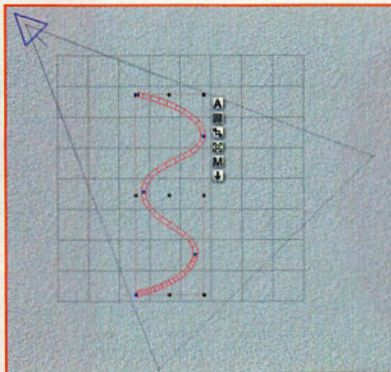
LOOK MA! NO KEYFRAMES!

In our opinion, the coolest Bryce 3D feature is the least obvious one—Geometric Paths. This animation workhorse is the least well documented section of Bryce, but it is by far the most innovative feature in the new animation toolkit.

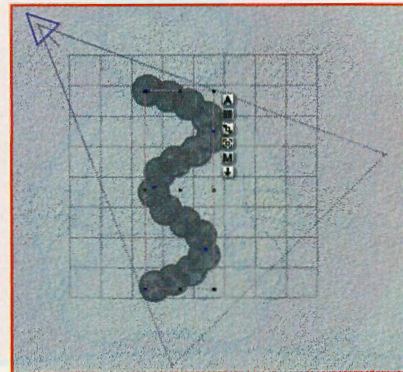
STEP 1: To make an animated worm creature, we start by creating a sphere in Bryce. In the view below, the sphere is animated along a squiggly path.



STEP 2: Using the Create Path command in the object menu, the sphere's motion path is turned into a Geometric Path. Then the sphere is deleted.



STEP 3: Another sphere is created and linked to the Geometric Path. It is constrained to the path and follows as it moves. This is repeated until the path is covered.



FREAKIN' AWESOME
The most valuable products, the coolest gizmos.



SPIFFY
A solid offering. Overall, a good investment.



YEA, WHATEVER
A few good features, but generally a waste of time and money.



BLECH!
We hate to even blotch our pages with the thing.

tried than described—it lends itself to some interesting motion.

Another unique animation tool is the Geometric Path, which constrains the motion of any object attached to it. You can keyframe Geometric Paths and put them within a hierarchy; you can even change their shape while an object moves along them. For example, by attaching a string of spheres or cylinders to a Geometric Path and animating the path's shape, you can create a wriggling, segmented worm. This is one sophisticated animation tool.

Next on the new-features list is Volumetric Textures. Previously, Bryce textures existed only on the surface of objects—fine for rocks and mountains, but hardly the best solution for clouds and water. The new Volumetric Textures add material inside an object; you can take your camera into a cloud and travel through the interior seeing mist all around. Volumetric textures aren't limited to cloud banks and oceans, either—you can fill an object with green spheres or three-dimensional licks of red flame.

The new Deep Texture Editor provides the kind of deep-down control over texturing that was previously missing from Bryce. In Bryce 2, the Deep Texture Editor was a hard-to-find dialog box that was too cryptic for most users. Bryce 3D has promoted the Deep Texture Editor to a full part of the Bryce interface. With it, you can modify every aspect of multichannel texturing, right down to the level of math functions to use when combining textures.

As inevitably happens when software gets more sophisticated, you pay for increased control with decreased simplicity. Advanced texturing in Bryce is still extremely technical. You'll spend plenty of head-scratching time with the manual and the software to figure out the Deep Texture Editor's controls, most of which are unlabeled. Fortunately, MetaCreations makes up for this with a comprehensive 500-page manual.

Bryce has many smaller enhancements, too. New atmospheric controls add effects such as sun rings, horizon distortion, rainbows, and interaction between the sun and fog in a scene. Visible lights are now rendered volumetrically and interact realistically with objects. Bryce 3D also imports Apple's 3DMF 3D-object file format as well as the widely used DXF-object file format, broadening the types of objects you can import.

One sorely needed feature is real-world scaling units. Especially when you're working with large scenes, it's easy to lose contact with

STEP 4: By grabbing the control points on the path, you can reshape the path into any pose. The spheres follow it exactly. By keyframing the shape of the path, it is easy to get the spheres to move in complex, flowing ways that would be extremely tedious to animate by hand-keyframing every object. As a finishing touch, a Volumetric Texture is applied to the spheres. This smooths the joints between them and gives the worm a shimmering quality.



The New Bryce

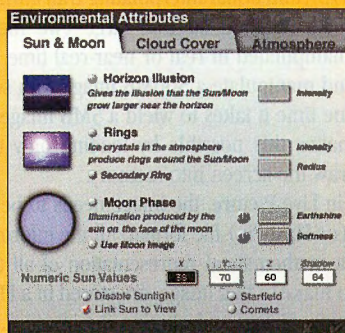
Take a look at some of Bryce 3D's new features and enhancements:



The Advanced Motion Lab is where you'll refine your animation. The sequencer resides in the bottom half of the screen, while the top half is divided between the preview window on the right and the Time Mapping Graph on the left.



The Deep Texture Editor gives you incredible control over the surfaces of your objects—if you dare to use it. The interface lets you mix and match different components in interesting ways, with control down to the mathematical level.



New atmospheric effects include sun rings, horizon illusion, and rainbows.

the size of your objects, which forces you to eyeball relative sizes. A simple ruler tool would alleviate this problem. There's no native depth-of-field (the effect of having near or far objects out of focus), but the program can render a depth map—an alpha channel that increases the darkness of objects the farther they are from the camera—that lets you add limited depth-of-field with another program, such as Adobe After Effects. Bryce supports mapping PICTs onto a surface or using them as separate PICT objects, but there's no way to map QuickTime movies or numbered PICTs into your scene.

Also, considering Bryce's new focus on animation, we were surprised at the inadequacy of its batch-rendering abilities. You can batch-process renders by dragging files onto the program icon, but you can't alter the order of rendered jobs or stop renders and start them again. Network rendering tools, so vital to production environments, are completely missing.

Bryce was a simple program that did islands and water and not much more. Bryce 3D is in a whole 'nother league. Its sophisticated new features make it a viable option for professional production while still embodying the spirit of cutting-edge 3D. —Raf Anzovin



GOOD NEWS: Unique animation controls. Volumetric surfaces. Better texture control. Comprehensive manual.

BAD NEWS: Cannot use movies as texture maps. Lacks real-world units. No network rendering.



reviews

Live Picture 2.6

COMPANY: Live Picture

CONTACT: 800-724-7900 or 408-371-4455; <http://www.livepicture.com>

PRICE: \$349 (street), \$149 upgrade

REQUIREMENTS: PowerPC, System 7.5 or later, 21MB of RAM (28MB recommended), 20MB of free hard disk space, 24-bit color monitor

Live Picture is one of the few image-editing applications that is different in any dramatic way from Adobe Photoshop (the only other one that comes to mind is MetaCreation's Painter). Most alternative raster manipulators offer a feature set similar to Photoshop's at a lower cost, but Live Picture offers both strikingly different technology and a varied working environment. Anyone creating or editing images on a Macintosh should investigate this program, especially if the work involves the creation of large, high-resolution images for print.

Live Picture's unique FITS (functional interpolating transformational system) technology is designed so that large (we mean humongous) files can be manipulated in real or near-real time. In Live Picture you can edit and manipulate a 500MB image with several layers in about the same time it takes to wield a 5MB image in Photoshop. Live Picture makes this possible by loading only the information needed to redraw the screen into memory.

To manipulate a photo in Live Picture, the image needs to be in the program's native IVUE (or FlashPix) file format. All the information about an image, and a mathematical representation of all the edits and manipulations you make to that image, are stored in a FITS file. When you finish changing, sizing, and altering the image, Live Picture builds the final file for output from the FITS file. The original source files are left untouched. The created FITS files are relatively small (regardless of the size of the source material), and builds can be of any size or resolution. You can output the image in a variety of file formats, including IVUE, Photoshop, PICT, TIFF, and EPS. A build's length is determined by the size of the output, the number of layers, and the amount of manipulation to each layer. You can put off builds and do them in batches when time is available.

Live Picture creates 48-bit graphics (as opposed to the standard 24- or 32-bit images in Photoshop and other programs), which



YOU CAN DRAW a very quick and rough path around this butterfly using the Edge Highlighting tool.



WITH THE PUSH OF A BUTTON this rough path is transformed into a nearly perfect mask, removing the background behind the butterfly.

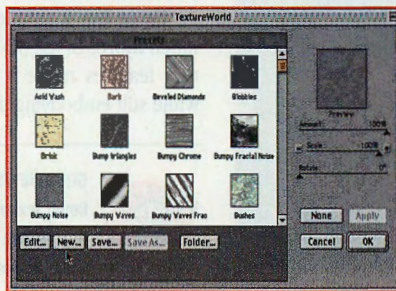
TEXTURE TECHNIQUE

Live Picture 2.6's new TextureWorld feature allows easy creation and application of textures. We used TextureWorld and a simple image of a Volkswagen Bug to generate a uniquely textured image.

STEP 1: Start with a single layer of a VW.



STEP 2: Using TextureWorld you can apply any number of preexisting textures, but for this example choose to create one from scratch.



STEP 3: When creating a texture, you can use any IVUE or FlashPix image as a source for each of the four types of mapping.



Mode Toggle switches between creative mode (shown) and positioning mode. When in positioning mode, tools for scaling, cropping, rotating, flipping, distorting, and controlling the opacity of layers are displayed.

The Tool Bar includes (A) a Brush tool; (B) an Erase tool; (C) a Knife tool for smudging and blending; (D) a Marquee tool for rectangular masks, fills, and gradients; (E) a Path selection with six tools for working with paths (including the new Edge Highlighter); (F) a Zoom tool; (G) a Pan tool; (H) a Color Selector; (I) Tool controls; (J) Pressure controls, and (K) Direction controls for constraining the angle of a selected tool.



Control Bar shows the name of the currently active layer and selected tool, and allows you to type in values for most settings.

Layer stack with controls for viewing and arranging layers as well as their masks and stencils.

yields higher-quality images; this is especially noticeable when printing color gradients.

Live Picture features most of the functions you expect from a graphics-editing program. These include tools for cropping, scaling, rotating, dodging, burning, blurring, sharpening, and all types of color correction. Live Picture also supports the Adobe plug-in standard, allowing Photoshop and third-party extensions to work within the program. Many Photoshop effects are much slower in Live Picture than they are in Photoshop, but in Live Picture you can brush plug-ins onto specific areas of an image. This offers a tremendous amount of control over effects.

Live Picture lacks Photoshop's channel operations and blend modes, however, and unfortunately doesn't offer grids, guides, actions, or custom key commands. But features such as unlimited levels of undo and scalable vector text will surely make Photoshop-only users jealous. We also found Live Picture's transparency tools to be more useful than Photoshop's. Each layer in Live Picture has both a mask and a stencil, allowing precise control over the transparency of each layer. Version 2.6 adds a hard-edge mask feature, which allows sharper and more precise masking.

Live Picture offers vector tools for creating paths, and a new edge-highlighting tool that greatly simplifies this path creation. With edge highlighting you can draw rough paths for masking, and Live Picture automatically generates a precise mask by detecting edges. Of course, this only works with contrasting edges, but it's handy for separating objects from their surroundings. Live Picture also imports paths from Photoshop and Adobe Illustrator

Other new features in version 2.6 include an improved gradient tool and resolution-independent gradients; full support for the FlashPix file format, giving images the tileable independence to be high enough quality for output to film or small enough to embed in an HTML page; and TextureWorld. In TextureWorld, you can apply pre-made textures to any layer and generate an infinite number of new textures using editable bump, color, opacity, and refraction maps.

Surprisingly, Live Picture is very efficient with RAM. The program's minimum requirement is 21MB, although 48MB is recommended for working with large images (hundreds of megabytes). Because the FITS files are so small, Live Picture also functions terrifically in a networked environment. You can easily send FITS files over a LAN, WAN, or the Internet, while the large IVUE files remain on a server to be accessed by multiple clients.

As one would hope from a program geared toward high-end printing, Live Picture works in CMYK mode. It also makes good use of Apple's ColorSync to control color accuracy.

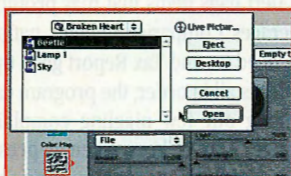
Live Picture ships with Canto Software's Cumulus Image Database application as well as more than 600MB of royalty-free images. It's a powerful package for working with images, even though for some functions, such as channel operations, you will need to keep a copy of Photoshop on hand as well. —Chris Florio



GOOD NEWS: Real-time manipulation of giant files. Excellent masking and compositing tools. Support for FlashPix Live.

BAD NEWS: Doesn't (and isn't really meant to) alleviate the need for Photoshop

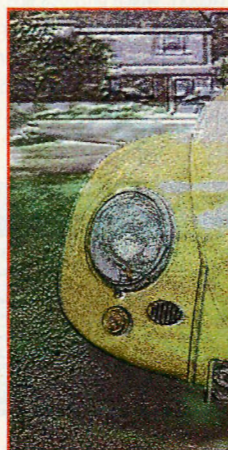
STEP 4: Choose the same image of the VW to use as the source for a Bump Map.



STEP 5: In the More Options section of the dialog box adjust the positioning of the Bump Map to line up with the original image in the layer.



STEP 6: The result of the Bump Map is a 3D-style effect that's much more interesting than a standard emboss filter.



STEP 7: Because the texture maps can be edited or removed at any time, you can go back and create a more dramatic effect by adding a little Fractal Turbulence to the Bump Map.





reviews

MacInTax Deluxe

COMPANY: Intuit

CONTACT: 800-446-8848 or 650-944-6000, <http://www.macintax.com>

PRICE: \$49.95 (SRP), \$39.95 for standard version

REQUIREMENTS: 68030 or faster, System 7.0 or later (7.1 for electronic filing), 8MB of RAM, 22MB of free hard disk space, 2X CD-ROM drive, 9600-baud modem or faster for electronic filing

Nobody likes paying income taxes. We're not all ready to hole up on a remote ranch in Montana over it, but the process of sorting out the IRS's forms seems worse than dental surgery to many of us. For help, we turn to our Macs—and hopefully some great tax software. One of the most venerable is Intuit's MacInTax.

MacInTax not only guides you through IRS forms, it automates as much of the payment process as possible. This year's version, MacInTax for the 1997 tax year, includes all the latest tax law updates and information from the IRS. If you used MacInTax 96 last year, the 97 version will capture your old data, so all you have to do is update it. MacInTax also captures data from other tax-preparation programs or from bookkeeping programs, such as Intuit's Quicken. MacInTax even automates electronic filing via email.

MacInTax comes in two flavors—regular and Deluxe. They are basically the same, except that Deluxe features more documented guidance. Included in Deluxe is the full text of the IRS's 30 most popular publications, the full hypertext of *Money Magazine's Income Tax Handbook* by Mary Sprouse, and *How to Pay Zero Tax* by Jeff Schnepper—plus a multimedia presentation on tax, and QuickTime videos with tips and information.

Once you decide on a package, there are two main methods of attack: fill out forms on screen or go through a somewhat lengthier Interview process. The Interview prompts the user for information on income, deductions, and exemptions, defining terms and pointing out some of the variations along the way. In the Deluxe version, Interview also brings up the QuickTime movies at crucial spots, explaining topics such as whether to claim depreciation on a home. There is also a FastTrack interview process, which provides check-boxes

THE TOP OF THE SCREEN is the Interview, and the appropriate Form shows below.

HELP CONTAINS full hyperlinked and searchable text of several IRS and independent publications.

Future Fortunes

The best new feature of MacInTax is the Tax Report, which provides tips to help you plan for saving taxes through 1998. The program analyzes your financial picture from the 1997 return, and outlines a few strategies—contributions to IRAs, depreciation on assets—that will help reduce the tax burden on next year's returns. This report can be printed to keep as a reference through the coming months.

for the various choices, types of income, and deductions.

MacInTax groups information in a logical sequence. (Wouldn't it be great if the IRS did the same?) For instance, home-based business operators can deduct a portion of the cost of their homes from their income. Part of that is claimed on Form 8829, and the rest on Schedule A. MacInTax prompts you to fill in the amounts for Form 8829, and automatically fills in Schedule A.

Once a return is complete, MacInTax has five Review procedures. Error Check looks for missed items or obvious mistakes; the Deduction Finder looks for any deductions you may have coming to you; Audit Alert flags items that may prompt the IRS to audit your return; US Averages Comparison shows nationwide averages for the items you've filled in; and Tax Report gives tips for reducing taxes next year. Once this is all in order, the program can email your return to the IRS.

Among our few nagging complaints is that MacInTax doesn't recognize Y or N keys when it presents Yes or No choices, and switching out of the program during a Review (to look up accounting files, for instance) forces you to start all the Reviews over again.

The bottom line is that MacInTax reduces the time needed to fill out an accurate tax return. You'll need this version (and a new one each year) because the tax laws change. —Scott Bury



GOOD NEWS: Easily imports data from previous tax prep applications. Interview feature guides you through preparation and filing.
BAD NEWS: Lacks obvious keyboard shortcuts. Language can be confusing. Stopping mid-Review forces you to repeat all Reviews.

ARNOLD PALMER

CONGRESSIONAL

VALDERRAMA

VALHALLA

TORREY PINES

DORADO BEACH

CASTLE PINES

PELICAN HILL

BAY HILL

PINEHURST

BOUNTIFUL

COURSE LIBRARY I

COURSE LIBRARY II

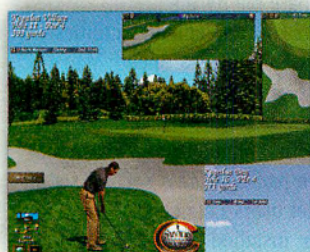
COURSE LIBRARY III

COURSE LIBRARY IV

DAVIS LOVE III

KAPALUA

MAUNA KEA



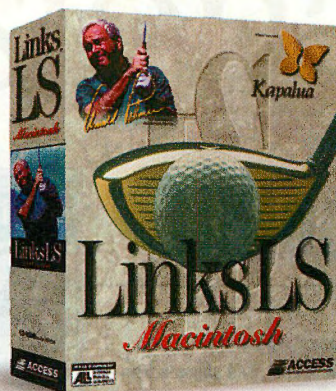
BANFF SPRINGS

HARBOUR TOWN

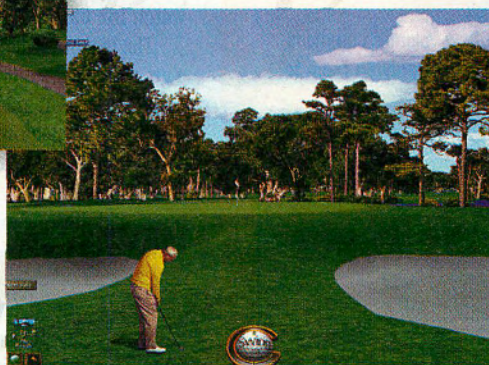
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Actual screen captures using Links LS Macintosh

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reviews

Hard Disk ToolKit

COMPANY: FWB Software

CONTACT: 800-581-4392 or 650-482-4800, <http://www.fwb.com>

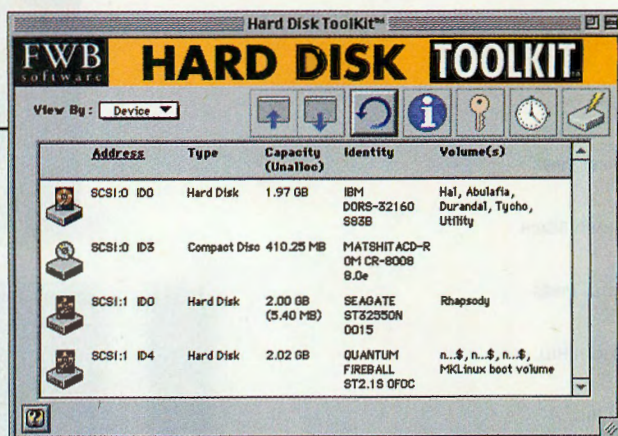
PRICE: \$127.95 (SRP); \$29 upgrade from HDT 2.0 or later; \$49 upgrade from versions earlier than 2.0

REQUIREMENTS: 68030 or faster, System 7.5.3 or later, 4MB of application RAM, SCSI CD-ROM drive (for booting from CD-ROM—the program will install from an ATAPI drive)

FWB's Hard Disk ToolKit is the ultimate utility for those who want to delve into a hard drive's particulars, and it's pretty darn good for those who just want to partition a drive as well. Besides providing basic drive utility functions (formatting, partitioning, and driver updating), the newest version of Hard Disk ToolKit lets power users tweak every controllable aspect of their hard drives (including SCSI settings), and it features some supplementary utilities to speed up the boot process, check for developing problems, and mount removable (and troublesome) drives. This is a real power tool.

In one of its most hyped additions, version 2.5 of Hard Disk ToolKit touts a new Power Macintosh-native driver optimized for Mac OS 8 and PCI-based machines. After installing the new driver on both SCSI- and IDE-based Power Macs (both with PCI slots), we saw slightly mixed results when it came to performance. Updating the driver produced only a slight performance boost (less than 10 percent) in access time, seek time, read and write transactions per second, and sustained read and write. Formatting the drive dramatically increased the number of read transactions per second and boosted the average seek time, but it slightly slowed down the sustained write operation.

HDT 2.5 fixes some problems earlier HDT versions had with IDE drives on Tanzania-based Macs, such as the Power Macintosh 4400 and



ALTHOUGH THE INTERFACE looks the same as earlier versions, Hard Disk ToolKit 2.5 packs some new punches.

Stability

For a stable Macintosh, do the following:

1. Back up all data on the hard drive.
2. Format the drive with Hard Disk ToolKit 2.5.
3. Create the disk partitions you'll be using with your drive.
4. Run HDT's device test function.
5. Install Mac OS 8, making sure the Update Apple Drivers function is off.
6. Reinstall your applications from good installer disks and restore all your data from the backup.

all Motorola StarMax clones. One problem was not being able to boot from a partitioned IDE drive on some systems. When we tested HDT on an IDE drive by updating the driver on a Power Computing PowerBase, we were surprised to lose the final partition on the drive. It mysteriously began identifying itself as a BeOS partition. To solve the problem, we backed up the drive's data, reformatted the drive, and restored the data. It was a pain, but after that the PowerBase ran reliably.

HDT 2.5 also includes some great supplemental utilities—TurboBoot, Diagnostic, and Removable. These speed Mac OS booting, check for potential trouble, and help mount removable media, respectively. Another added bonus: HDT installs FWB Mounter, FWB SCSI Configure, FWB Tool Manager, and FWB Event Monitor for the ultimate hard drive package. This second set of utilities mount balky hard drives, let users change SCSI parameters, help users control the other installed HDT utilities, and watch for hard disk problems.

The troubles with the IDE hard drive aside, Hard Disk ToolKit 2.5 is a great utility. Creating MKLinux partitions was a little cryptic (requiring help from the manual), but the other functions were accessible and easy to use. True power users will salivate over the prospect of endless tweaking for performance; security-minded Mac mavens will rest easy at HDT's encryption, password protection, and copy protection features; and those who just want to partition their Mac's hard drive will find what they need. —David Reynolds

Partitioning

There are several reasons to partition your Mac's hard drive.

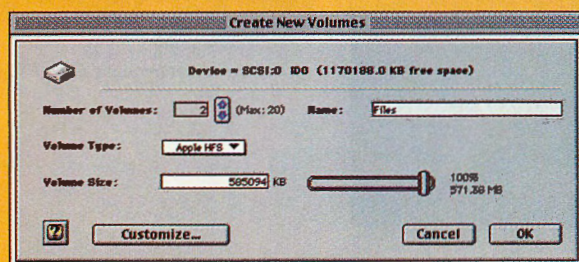
- It keeps file sizes smaller on larger hard drives.
- It provides a small performance increase.
- It helps prevent viruses from spreading.
- It minimizes damage caused by hard disk problems.

Partitioning your drive with Hard Disk ToolKit is relatively easy.

- Back up all data to a different physical disk.
- Launch Hard Disk Utility and format the disk.
- Create new partitions using FWB's Create New Volumes command.

Be sure to make the partitions large enough to provide room to grow.

- Quit HDT, reinstall your software, and restore your files.



GOOD NEWS: Easy disk partitioning. Bootable CD-ROM.

Background drive formatting. Great security. Support for PCMCIA drives. Lots of depth to application.

BAD NEWS: Performance boosts from new driver dubious at best. Still not easy to create an MKLinux partition.



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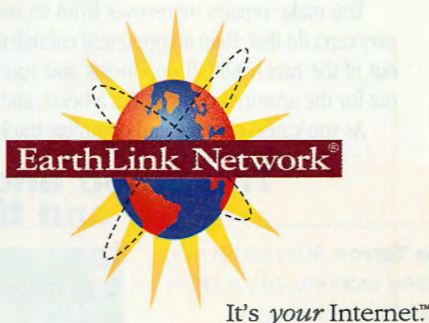
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reviews

Carmageddon

COMPANY: Aspyre Media

CONTACT: 888-212-7797 or 512-708-8100; <http://www.aspyr.com>

PRICE: \$44.99 (street)

REQUIREMENTS: 80MHz PowerPC or faster, System 7.5 or later, 12MB of RAM, 20MB of free hard disk space, Sound Manager 3.1 or later, 2X CD-ROM drive, Open Transport for network games



The Yellow Hawk is your first instrument of terror.

Carmageddon is a car-racing game—one where you get a thousand points for plowing down the guy waving the starting flag and you don't have to actually finish the race to win. Killing your opponents will suffice. You leave bloody tire tracks behind your screeching hot rod, fresh from the old woman who couldn't maneuver her walker fast enough to get out of the way. You plow a field of riot gear-laden cops. You detour through a crowded stadium or race in a mall.

The gore starts right from the get-go. The cursor you use to choose your driver, select options, and start the race appears as a blood-dripping, disembodied hand. And while Carmageddon relies on the time-honored drive-through-checkpoints-before-time-expires model, it awards you more time when you run down pedestrians, slam into other drivers, run over bonus barrels, or pull especially cunning moves (usually airborne, rotating flips off a makeshift jump).

You make repairs or recover from an overturn on the fly—other cars can't do that. Ram an opponent enough times and he's dead (thus out of the race). Kill all opponents and you win the race. Just watch out for the armored cop car; it's a beast, and very hard to damage.

As you cause carnage and complete tracks, you rise in rank, earn

money to upgrade car parts, and encounter new tracks. Rise enough ranks and you can steal new cars from dead opponents. Carmageddon also features multiplayer games. Choose pure smash-each-other fun, see who can kill pedestrians first, or race through checkpoints.

As for longevity, Carmageddon is a quick high. It swallows you for a couple of weeks, plunging you into obsession, and then lets go. At a certain point the game becomes extremely repetitive. Kill, kill, kill. All work and no play... Another problem is the game's load speed. It's damn slow. Even after copying the entire game off the CD (347MB), loading tracks took way too long.

It goes without saying that Carmageddon is not a game for everyone. Small kids probably shouldn't even read this. And those fed up with the level of violence on TV will be offended. In truth, even after hours of solid play, we weren't tempted to actually kill anyone while driving, but the game definitely wouldn't make it past a V-chip.

However, Carmageddon is a well-designed game. We don't give marks for sheer gruesomeness alone. The game is plain fun to play. It's a port from the PC so there are a few bugs, and half the world has already played the game, grown tired of it, bought add-on packs, and grown tired of those. But it's a good port and brand new to us. To make it better, by the time you read this, Carmageddon should be supported by 3Dfx 3D cards (namely TechWorks' Power 3D). Those plasma-spurting Vesuvian corpses will be quite a sight. —Robert Capps

The blood and the mud and the cheers

Tailgate Terror: At the start of a race, head full-speed backward, and you can sometimes kill the guy behind you.

Get the Go Guy: Kill the guy who waves the flag and starts the race. He's worth a lot of points, especially if he survives the first lap.

Sidewalk Sunday: Stay on the side of the road. Pedestrians hang out there.

Crush Competition: Killing all other drivers increases your payoff and heightens your chances of stealing cars.



SQUISHING GRANDMA IS FUN AND EASY

STEP 1: Locate someone's grandmother going for a nice stroll in a large dirt field.



STEP 2: She'll try to shake you off her tail with the help of her walker...



STEP 3: ...but if you stay on her, you'll be rewarded with some good credits you can use toward your car.



GOOD NEWS: Gratuitously sick, addictive racing. Good sounds. Fun tracks. Terrific graphics.

BAD NEWS: Car control is not the best. Play gets repetitive. Long load times.

reviews

Jack Nicklaus 4

COMPANY: MacSoft

CONTACT: 800-229-2714 or 612-509-7600, <http://www.wizworks.com/macsoft>

PRICE: \$69.99 (SRP)

REQUIREMENTS: PowerPC, System 7.5 or later, 16MB of RAM, 75MB of free hard disk space, 4X CD-ROM drive, thousands of colors at 640-x-480-pixel resolution or better

Jack Nicklaus is a living legend. Eighteen major PGA championship titles. Seventeen holes-in-one. Five-time player of the year. A golf game sporting a name like Nicklaus has a lot to live up to. Jack Nicklaus 4, the latest incarnation in the Nicklaus series for the Mac, improves on its predecessors by adding richer, more-detailed graphics, better ball physics, numerous multiplayer options (LAN, AppleTalk, Internet), and more types of golf games to play. Accolade, the original developer, worked hard to make Jack 4 a game worthy of its namesake. Unfortunately, it failed.

Jack 4 promises "graphics so detailed they look like photos"—a promise it doesn't keep. Some of the details are good—the foggy weather, the detailing on the golf ball, the trimming of the fairways—but the graphics are a far cry from photorealistic. Instead, they appear as typical 3D-rendered images. To make matters worse, Jack 4 crams background photos next to these graphics. The result is jarring.

Forget the graphics, let's get to the gameplay. You aim shots with a superimposed arrow, then click three times on the swing meter to hit the ball. Nothing special here. Most shots are accurate. But there are times when Jack 4 cuts you too much slack. On the pro level, it's too easy to hit good iron shots, even when you totally mis-hit the ball. This advantage may be great for first-time computer duffers, but it won't win over old pros.

Once the ball flies, it travels accurately. The ball physics are incredibly realistic. It's heartbreaking to watch a putt slowly roll 30 feet past the hole on a sloping green, but it's realistic. Unfortunately, you can view these dynamics from only one angle. You can view the course from four different heights, but not when hitting. There isn't an overhead view that can be on at all times, so aiming is



THE GRAPHICS ARE FAIRLY DETAILED, especially when you use the foggy weather option.

more complicated than necessary.

If you ignore these faults, you'll enjoy the five courses. The legend himself designed four of the courses. You can play at Mexico's Cabo del Sol, which includes Nicklaus's two favorite "finishing holes," or play a round on South Carolina's Colleton River Plantation, what many pros call his best-designed course. Tee off at Atlanta's tree-lined Country Club of the South or Ohio's Muirfield Village, a course often rated among the top 10 U.S. courses.

The fifth course in Jack 4 was designed using the program's easy-to-use course designer. With this terrific device, take a stab at designing your own courses as well. Put in nasty dog legs or enormous hills or island greens. But beware: It requires a lot of work. You have to plan the layout of a course and then put in everything from trees to ball washers. It's not a quick process, but it is fun.

Despite the course designer, Jack 4 is not the best golf game. Access Software's Links LS offers two important advantages: richer graphics and better gameplay. Jack 4 redraws about twice as fast as Links, which makes play more bearable at higher resolutions, and Links LS doesn't come with a course designer. But we'd rather be *playing golf* than building courses for an inferior golf game. In the end, Jack Nicklaus's line of golf sims doesn't live up to his legend. —Dean Renninger

GOOD NEWS: Great courses and course designer. Detailed graphics.

BAD NEWS: Play is too easy, even on pro level. Limited ways to view a course. Graphics can be jarring.



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is the ideal of all
logical thinking..."

Ockham's Razor
(William of Ockham: 1285 -
1349 AD)

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reviews

Lords Royal Collection

COMPANY: Sierra Online

CONTACT: 800-757-7707 or 425-649-9800, <http://www.sierra.com>

PRICE: \$59.95 (\$RP)

REQUIREMENTS: 25MHz 68040 or faster, System 7.5 or later, 12MB of RAM, CD-ROM drive

Lords Royal Collection is an anthology of Sierra Online's classic strategy series, Lords of the Realm. Only Lords of the Realm II with a built-in Siege Pack is for Mac gamers; the other three CDs contain Lords I, Lords II, and the expansion Siege Pack for the PC. This is very annoying but currently our only way to get the fantastic Lords II.

The game takes place in feudal England and is a cross between games such as Microprose/Macsoft's Civilization and real-time strategy titles such as Blizzard Entertainment's Warcraft. The majority of gameplay consists of managing seasonal resources such as cattle, wheat, and stone, building castles, and maintaining the happiness level of serfs. Unlike many sims, Lords II never bogs down in micromanagement; instead, you govern by grand strokes. Rule well, and the king's crown is your ultimate reward.

As a pure sim title, Lords is merely above average. The real-time combat aspect, however, raises the experience to awesome, adding a fun diversion from the daily cares of a despot. Skirmishes are

TO BECOME KING, you must lay siege to your opponents' castles—watch out for the burning oil.



fairly quick, bloody encounters that play like Warcraft scenarios. Use archers to pick off the most dangerous opponents, and mop up with pikemen or cavalry. Castle sieges bring catapults, siege towers, and battering rams into the fray.

In a world of increasingly PowerPC-only games, Lords of the Realm II is one game that plays beautifully on older 68040 systems, and it's one of the few multiplayer empire-building games. Unfortunately, Lords' PC origins are painfully clear in the game's interface.

Despite its PC vestiges and packaging, Lords is among the best strategy games you can buy for your Mac. —Rick Sanchez



GOOD NEWS: A great strategy game. Plays well on 68040 systems.

BAD NEWS: An imperfect port from the PC version. Comes with more complete Windows collection.

PhotoTools 2.0

DEVELOPER: Extensis

CONTACT: 800-796-9798 or 503-274-2020, <http://www.extensis.com>

PRICE: \$129.95 (street), \$49.95 upgrade (free to those who purchased version 1 after Sept. 19, 1997)

REQUIREMENTS: 25MHz 68040 or faster, System 7.5 or later, Adobe Photoshop 3.0.4 or later, 24MB of RAM or more devoted to Photoshop recommended

If you're still struggling with Adobe Photoshop's own cryptozoic text tool, or you're still doing the skew-the-alpha-channel-apply-Gaussian-blur-create-a-new-layer-and-set-the-transparency routine to make a drop or cast shadow, you need Extensis PhotoTools 2.0, a suite of plug-ins for editing text, adding shadows, and creating embossments.

The most useful PhotoTools module is PhotoText, a WYSIWYG text editor. No more blindly typing text into Photoshop's modal text box and hoping it looks good when you pop back out to the image (it never does on the first try). Instead, you get an interactive preview of your picture, with full font, style, kerning, and color tools. Type your text (in multiple text blocks), drag it around, and change the font, size, or color, all without penalty. New in this version is the ability to save and reedit text blocks and create text style sheets.

On the downside, you can't rotate or skew text in PhotoText, and kerning can cause broken ligatures in cursive fonts. Also, PhotoText's text antialiasing is not as smooth as Photoshop's. And the preview window sometimes chokes when redrawing large amounts of text.



PREVIEW AND PLACE TEXT anywhere in your image.

The PhotoCast-Shadow module interactively makes shadows for any selection or area defined by a layer's transparency

mask. You can set the shadow's offset, direction, length, edge and perspective blur factor, transparency, blend mode, and color.

PhotoButtons makes custom Web button graphics from 16 predefined shapes. OK, maybe you've already got a collection of 15,000 premade buttons, but these can have exactly the color and lighting of your choice. Apply sophisticated edge glow effects with PhotoGlow. Or make any selection pop up and stand out with PhotoBevel and PhotoEmboss, both of which give you more control than Photoshop's minimalist Emboss and Extrude filters.

All told, PhotoTools 2.0 is a solid Photoshop enhancement that's bound to save you time and effort. —Steve Anzovin



GOOD NEWS: Superior tools for placing text. Interactive shadowing, embossing, and glows. Quickie buttons.

BAD NEWS: Hard-to-fix kerning problems with cursive fonts. Can't rotate text. Anti-aliasing not up to par.



FIND A DEMO of PhotoTools 2.0 on The Disc.

reviews

GearBox 1.5

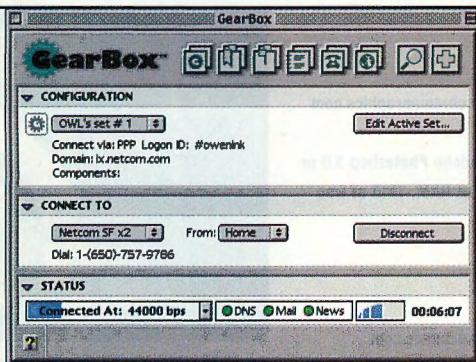
COMPANY: Rockstar Studios

CONTACT: 415-242-1984,

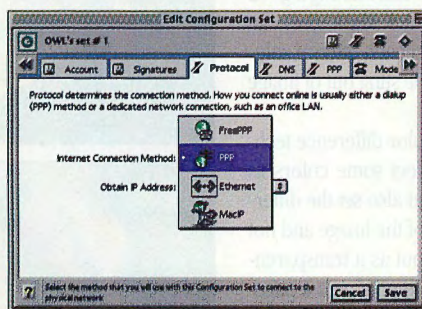
<http://www.rockstar.com>

PRICE: \$44.95 (SRP)

REQUIREMENTS: 68020 or faster (PowerPC recommended), System 7.1 or later, 8MB of RAM (16MB recommended), 7MB of free hard disk space, MacTCP 2.06 or Open Transport 1.1 or later



ALTHOUGH NOT NECESSARY for connecting, GearBox provides useful status information, including throughput rates, server availability, and net traffic volumes.



GEARBOX'S STEP-BY-STEP configuration process makes it easy to create separate sets for multiple users with different needs.



FIND A TRIAL version of GearBox 1.5 on The Disc.

Even with the Apple Internet Setup Assistant introduced in Mac OS 8, configuring the myriad control panels you need to get online remains a perplexing chore; heaven help you if you want to do anything tricky. That's where GearBox comes in. This inexpensive Internet-management tool provides a central location for creating configuration sets; it also shows the status of your connections, and diagnoses setup problems automatically.

The first time you run GearBox, it walks you through the process step-by-step, gathering existing Internet settings from various sources and explaining your choices. It takes just a few minutes, and you can create as many configuration sets as you need, including separate ones for Ethernet and modem connections, or location-specific sets. You can even establish bookmarks, address books, mailboxes, and preferences for multiple users sharing a single computer. When you're finished, select the set you want and GearBox makes all the necessary adjustments to the disparate Internet control panels and applications with a click of a button.

After you've configured GearBox, you needn't open it again, unless you want to use the dialer and see the connection-status display. With these you can choose to show best or current throughput, connect speed, or local IP address over a real-time bandwidth meter. Status lights indicate whether your ISP's news, mail, and DNS servers are available, and you can monitor the volume of Internet traffic, which is good for diagnosing slow response times and connection troubles.

GearBox automatically compares current system settings with your configuration set and alerts you



GOOD NEWS: Simple, one-stop Internet configuration. Useful status and diagnostics tools. Free upgrade.

BAD NEWS: Not all modems specifically supported. Documentation lacks index.

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reviews

MagicMask versus Mask Pro 1.0

MagicMask

DEVELOPER: Chroma Graphics

CONTACT: 888-824-7662 or 650-685-6800, <http://www.chromagraphics.com>

PRICE: \$99.99 (SRP)

REQUIREMENTS: 68040 or faster, System 7.1 or later, Adobe Photoshop 3.0 or later (or Photoshop 3.0 plug-in API compatible), 16MB of RAM, 1MB of free hard disk space

Mask Pro 1.0

DEVELOPER: Extensis

CONTACT: 800-796-9798 or 503-274-2020, <http://www.extensis.com>

PRICE: \$299.95 (street)

REQUIREMENTS: PowerPC, System 7.5.1 or later, Adobe Photoshop 3.0.5 or later

Who was that masked man? If separating people and objects from an image is your thing, then you know that making a good mask with Adobe Photoshop's lasso and Quick Mask tools can be a long and tedious process. Extensis and Chroma each offers a solution to this problem, and while both take some of the sting out of image separation, only one performs like a true pro.

Extensis's Mask Pro, that is. Mask Pro uses a color-difference technique to work its masking trickery. It lets you select some colors as "drop colors" and others as "keep colors." You can also set the difference between selected colors to mask some areas of the image and not others. A mask generated in Mask Pro can be output as a transparency in a Photoshop Layer, as a Layer Mask, or as a clipping path a page-layout program can use to control the flow of text around an image.

The genius of the Mask Pro technique is that it allows you to use a brush to apply different combinations of keep and drop colors to limited areas of an image, enabling you to create accurate mattes with amazing subtlety. (Other programs apply keep and drop colors to the entire image, which rarely works well.) With a little effort, you can coax Mask Pro to preserve the fine transparencies in hair and glass, which is nearly impossible when drawing masks by hand in Photoshop.

However, Mask Pro's color-matching technique can't handle colors that are too close together. To deal with this, the program contains a full set of brush and path tools for painting into and out of the mask. A special hole-finder view exaggerates difficult-to-find semitransparent holes in the mask that might otherwise go unnoticed.

The elegant way Mask Pro brings together such diverse masking tools into one centralized, comprehensive interface is perhaps its best feature. Careful attention has clearly been paid to workflow and organization. For example, you can organize keep and drop colors into sets that you use to turn groups of colors on and off quickly while going over an image. Little features like this make all the difference.

By contrast, Chroma Graphics' MagicMask provides a unique snap-to-edge lasso. You can use it to snap a selection to any edge as you draw over it. It's usually accurate, and allows you to adjust the edge manually before turning it into a mask. If you've ever tried this with the lasso in Photoshop, you'll celebrate MagicMask's advantage.

MagicMask also excels at color-correction work. The Density Mask tool picks up on individual colors and creates blended mattes that isolate those colors. The program easily isolated all the skin tones in an image and made them blue, without touching any other element.



MAGIC MASK: To matte the image in MagicMask, we used the snap-to-edge selection tools. Result: high fidelity in the shape of the selection, but very little in the quality of the edges. (See how the lack of antialiasing created jagged shapes around the outline of the hand.)



MASK PRO: Despite the busy background, we were able to use Mask Pro's color-difference tools on almost all the edges with great success. The arms and hands, especially, have subtle blurring and translucency around their edges preserved from the original photograph.

But in practice MagicMask is the lesser of the two programs. Its most obvious—and fatal—flaw is its lack of antialiasing. Except for the Density Mask, all of MagicMask's tools create a hard, jagged edge without any translucent tones between the transparent and opaque areas, essentially making pro-level masking impossible. Mask Pro's comprehensive color-difference tools can pick up subtle variations in edge transparency that MagicMask loses completely. MagicMask's interface also paled in comparison—it's functional but cluttered, and the loud patterned background makes it difficult to adjust things efficiently.

If color correction is mainly what you do, then MagicMask would be a valuable addition to your toolkit. Otherwise, Mask Pro gives you the best masking for the money.—*Raf Anzovin*

MagicMask

GOOD NEWS: Good color-correction tools. Offers ability to snap selection to the edges of an object. Unlimited undo and redo.

BAD NEWS: No antialiasing. Creates primarily hard edges. Color-range tools ineffective. Interface somewhat cluttered.



Mask Pro 1.0

GOOD NEWS: Preserves subtle detail in masks. Creates automatic clipping paths. Comprehensive interface. Unlimited undo and redo.

BAD NEWS: Absolutely none.



reviews



reviews

Final Draft 4.1

COMPANY: BC Software

CONTACT: 800-231-4055 or 310-636-4711, <http://www.bcsoftware.com>

PRICE: \$249 (SRP)

REQUIREMENTS: 680X0 or faster, System 6.07 or later, 2MB of application RAM, 5MB of free hard disk space

All would-be screenwriters' greatest fear is that their *magnum opus* won't make it past a Hollywood reader's in box because the margins are off or a "continued" line is missing. To be taken seriously, scripts must adhere to proper style. BC Software's Final Draft easily handles what used to be a tedious task. Use it, and allow yourself to concentrate on the creative process rather than worry about spacing.

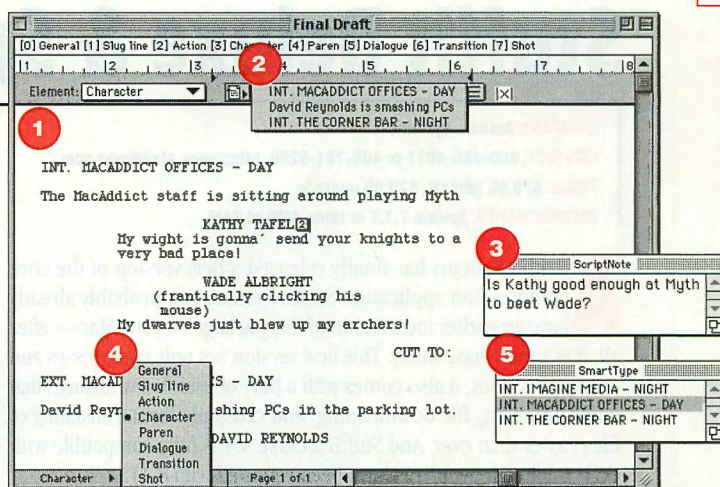
Final Draft is a word processor designed to crank out plays (screen, stage, or TV). All the essential writing features are built in, including a 120,000-word spell checker, a thesaurus, macros, HTML export, up to 20 levels of undo, RTF import and export, and drag-and-drop editing.

The most immediately useful script-specific feature is autoformatting. By loading an elements set (similar to a style sheet in Microsoft Word), Final Draft immediately formats a new script to suit the needs of a stage-, screen-, or teleplay. If you decide the screenplay you've been writing would work better on the stage, three clicks will load the stage play elements set—your slug lines, parentheticals, and dialogue are reformatted, from title page to curtain down.

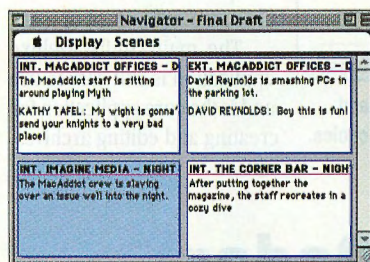
Tabbing and Shift-Tabbing in Final Draft cycles forward and back through standard elements such as slug line, action, character, and dialogue. Built-in macros also adjust formatting or insert new, ready-formatted paragraphs. And don't worry about work already in progress. Scripts written in Microsoft Word using style sheets can be imported directly into Final Draft and automatically formatted. Scripts written in other applications can be imported as ASCII text and autoformatted.

Another great feature is Scene Navigator, which lets you view an entire script as a series of index cards or a traditional outline format. You get a quick overview of a script's scene structure, and you can dynamically rearrange scenes. As you move simulated index cards or outline entries, the script updates to reflect changes. BC Software sells perforated index card sheets separately, so you can neatly print these cards.

More subtle features include ScriptNotes, which are digital stick-



- 1. Main Window**—Looks like a standard word processor.
- 2. Bookmarks**—Quickly jumps to scenes or important parts of your script.
- 3. ScriptNote**—Holds bits of dialogue, whole scenes, or notes to yourself.
- 4. Element Pop-Up**—Changes paragraph formatting.
- 5. SmartType Scenes**—Builds a list of scene titles that pops up when you start a new slug line.



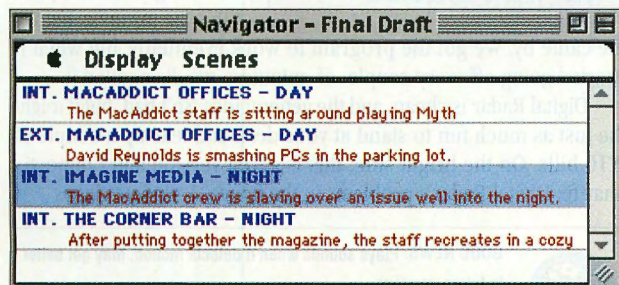
THE ELEMENTS DIALOG BOX lets you adjust element settings or create your own.

ies you can place as reminders or script fragments, and SmartType, which fills in character names, slug lines, and transitions after you type the first few letters, based on commonly typed entries. And Final Draft supports dual-column dialogue, A and B pages, bookmarks that let you

jump to important passages, locked pages, automatic "continued" and "more" lines, and revision marks. It also offers an export feature for scheduling programs such as BC Software's Production Manager and Screenplay System's Movie Magic Scheduling.

Despite this impressive feature list, Final Draft has some slight drawbacks. First, its documents are in a proprietary format and can be read only by Final Draft or a Final Draft Reader, which you can distribute with your script. Also, Final Draft is key based, so you can authorize only two hard drives to run the program, or you must insert the key disk floppy when you launch. And at \$299, the price is high compared with many word processors.

These quibbles aside, Final Draft is an outstanding tool dedicated to scriptwriting. BC Software provides excellent customer support, regular updates, and several add-ons for unique writing needs. For anyone writing a script, no other software offers as many useful features. —Rick Sanchez



THE SCENE NAVIGATOR lets you view your script in outline or index card mode, and dynamically rearrange your scene order.



GOOD NEWS: Support for stage-, screen- and television-formatted scripts. Dozens of scriptwriting-specific features.

BAD NEWS: Costs more than most word processors. Proprietary document format.



reviews

StuffIt Deluxe & SpaceSaver 4.5

COMPANY: Aladdin Systems

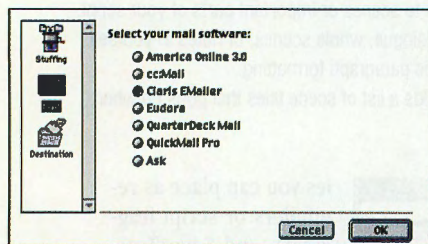
CONTACT: 800-480-4011 or 408-761-6200, <http://www.aladdinsys.com>

PRICE: \$79.95 (street), \$29.95 upgrade

REQUIREMENTS: System 7.1.1 or later, 4MB of RAM

Aladdin Systems has finally released a new version of the core compression application StuffIt Deluxe. You probably already have an earlier incarnation of this package on your Mac—after all, it is a must-have utility. This new version not only compresses and decompresses files, it also comes with a bevy of useful new features that make archiving, file downloading, and cross-platform translating of files easier than ever. And StuffIt Deluxe 4.5 is fully compatible with OS 8 (although problems have been reported with 8.1).

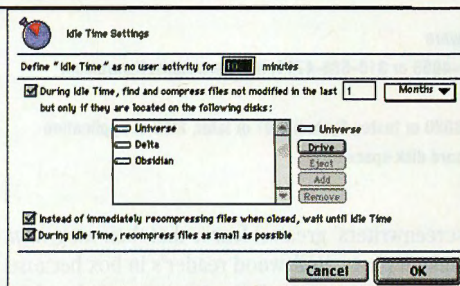
From the Finder, you can create, browse, and edit compressed files by double-clicking on them. The Magic Menu features keyboard



StuffIt Deluxe's Magic Menu lets you stuff and send files using your e-mail application of choice.

controls for stuffing and expanding files, along with an option to stuff and send a file via email. Archive Via Rename cleverly compresses and decompresses files based on the file-name suffix of .sit or .sea.

The main StuffIt Deluxe application is still easy to use and is the core application for creating and editing archives.



ALADDIN'S SPACESAVER can be set up to compress files on hard disks and removable media when the Mac is idle.

New file formats, such as MIME/base64, ShrinkWrap disk images, and .LHA files, are included with the 4.5 release.

The last part of the StuffIt Deluxe package is SpaceSaver. This customizable utility functions as a dynamic hard disk space saver that compresses files based on date, label, or file name. You set up the preferences, and SpaceSaver compresses your documents while your Mac is idle. When SpaceSaver compresses files they are still available for use; it decompresses them automatically.

With StuffIt Deluxe, Aladdin has built upon a Mac legacy application; it's a program every Mac addict should have. A few problems have been reported, but the company is offering a patch on its Web site that should fix most of them.—*Tony A. Bojorquez*



GOOD NEWS: Greatly useful application. Version 4.5 reads more file formats.

BAD NEWS: The version you already have was probably free.

Digital Radar

COMPANY: Connectix

CONTACT: 800-950-5880 or 650-571-5100, <http://www.connectix.com>

PRICE: \$29.95 (street)

REQUIREMENTS: 68030 or faster, System 7.1 or later, 8MB of RAM, 10MB of free hard disk space, CD-ROM drive, QuickTime-compatible video camera

Digital Radar turns your QuickTime video camera (preferably a QuickCam) into a motion sensor. You set the software to begin monitoring at a certain time and date, leave the application running, and the software captures images when it detects movement.

Unfortunately, Digital Radar is not ready for prime time. You can control the sensitivity of the software, but it's difficult to get the settings right. Digital Radar records too many lighting fluctuations and only records movement a foot or less from the camera. In one test at the default settings, Digital Radar recorded 25 minutes of lighting, consuming a whopping 75.6MB of hard disk space. You can set maximums on the number of recordings the program will keep and take steps to reduce the size of saved files, but the cache often fills with junk, and Digital Radar then won't store more images.

The only cool thing about Digital Radar is its ability to play sounds when it detects motion. A computer that taunts unwitting passersby is a tempting idea. Unfortunately, repeated attempts to have it



SIGH. SPYING ON people with a QuickCam could be fun—if Digital Radar worked better.

surprise editor Dave Reynolds with snide comments failed. Once, the computer went to sleep and the program failed to record. Several times the cache for recordings filled up in the 20 minutes before

he came by. We got the program to work eventually, but when it started going off every couple of minutes, we dismantled it.

Digital Radar is cheap, and the general idea isn't bad, but it might be just as much fun to stand at your desk and tear up a couple of \$10 bills. On the bright side, this is a first version and Connectix may fix Digital Radar's problems in the future.—*Robert Capps*



GOOD NEWS: Plays sounds when it detects motion. May get better in future versions.

BAD NEWS: Captures hundreds of megabytes of nothing. Getting settings right is difficult.

reviews



reviews

D-500L and D-600L Digital Cameras

DEVELOPER: Olympus

CONTACT: 800-622-6372 or 516-844-5000, <http://www.olympus.com>

PRICE: D-500L \$899 (street), D-600L \$1,299 (street)

REQUIREMENTS: System 7.1 or later, plenty of AA batteries recommended

Look for 1998 to be the year of the digital camera, as these filmless wonders drop drastically in price and increase radically in power. Two stellar new entries in this fast-moving field are Olympus's D-500L and D-600L.

The cameras look similar, with a sleek, lens-integrated design (inspired by Olympus's successful IS series film cameras) that fits your hand well. They share some impressive specs, starting with the lens—a seven-element, aspherical, all-glass f/2.8 with powered zoom with macro capabilities. The 3× zoom ranges from 36mm to 110mm focal lengths; in macro mode it provides close-ups 12 to 24 inches from the subject. The cowed lens moves smoothly and quietly with a fingertip control at the shutter release. Photo pros may prefer the flexibility of a removable lens, but for everyone else, this is as good a lens as you'll find on a digital camera anywhere near this price range.

The center-weighted, contrast-detection autofocus system is a bit slow but offers a focus lock and manual override. The pop-up auto-flash has red-eye reduction, fill flash, and low-light and backlight modes. The viewfinder is a single-lens reflex TTL (through the lens) with LEDs that tell you when flash and focus are ready. Sports photographers take note: We couldn't take flash shots faster than one every two or three seconds.

Three modes of JPEG-based image compression are available—standard, high quality, and super high quality—selectable from the camera's data menu. Images are stored on SmartMedia cards, which are widely used in other digital cameras, including Apple's QuickTake 200. (The cards, also known as SSFDC or solid state floppy disk cards, run about \$60 for 4MB, \$90 for 8MB.) Images are displayed in a color LCD panel on the camera back; a button-driven menu lets you view stored pictures, clear the SmartMedia card, or set various camera parameters.

There are some crucial differences between these two cameras. The high-end D-600L takes high-res 1.4-megapixel (million pixel) images (1280 × 1024 at high-pixel resolution,

USE THE VIEWFINDER for shooting and the LED for adjustments and previews.



Photos by KB

THESE CAMERAS FEATURE the same design, but the darker D-600L packs a 1.4-megapixel wallop.

640 × 512 at standard res). That's a real advance in resolution for cameras in this price range. The D-500L maxes out at 0.85 megapixels per image (1024 × 768 and 640 × 480 pixel resolutions), which still makes good-looking pictures and costs \$400 less. The D-600L comes with a 4MB SmartMedia card that stores 4 to 50 images, depending on resolution and compression; the D-500L has a 2MB card that holds 3 to 25 images.

Downloading images is a snap. Olympus supplies utility software, Adobe PhotoDeluxe, an Adobe Photoshop/PhotoDeluxe plug-in, and a serial cable. Connect the camera to the modem port, turn on the camera, launch the software, and download the pics. You can also use the software to remotely operate all the camera's features—a plus when shooting in the studio.

You'd think the D-600L's \$1299 price tag would include an AC adapter, but it's extra. And you'll want it. Our preproduction review unit ripped through a 20-pack of AA alkalines like Cookie Monster chomping a bag of Oreos. It's especially galling to watch the camera steadily drain its batteries while you download pics.

When you see your first high-res shots from either of these cameras, you probably won't care about the batteries. The D-600L captures the best-looking digital photos—sharp, vivid, and color-true—that you can get for under \$5000, while the D-500L offers the best balance of performance and price for under a grand. —Steven Anzovin



THE D-600L'S HIGH-RESOLUTION pictures yield superb detail and bright, natural colors. The camera's flash provided most of the illumination.



D-600L

GOOD NEWS: Incredible image quality. Comes with Mac connection kit. Software is easy to use.

BAD NEWS: Heavy, heavy, heavy battery habit. Doesn't include AC adapter.



D-500L

GOOD NEWS: Superior image quality. Comes with Mac connection kit. Good balance of price and features.

BAD NEWS: Heavy battery habit.



reviews

Apple Remote Access Personal Server

reviews

COMPANY: Apple

CONTACT: 800-538-9696 or 408-996-1010,

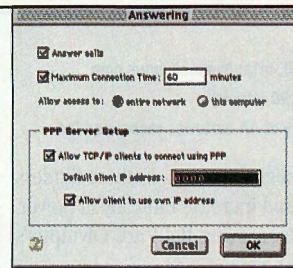
<http://www.claris.com/products/apple/applesrvr30/applesrvr30.html>

PRICE: \$129 (SRP)

REQUIREMENTS: System 7.1 or later, 8MB of RAM, 9,600bps or faster Hayes-compatible modem (or ISDN), Open Transport 1.1.1 or later

Network computers sound like hype from the mind of an overcaffeinated marketing professional. But think how cool it will be to connect to your computer network, no matter where you are, and have it seem as though you're sitting comfortably in your office. While waiting for Apple to make up its mind on the network computer (NC) subject, try Apple Remote Access Personal Server 3.0. Apple Remote Access (ARA) has been allowing remote connections for years, but, by adding Point-to-Point (PPP) support to Personal Server 3.0—thus bringing the Internet along for the ride—Apple makes the remote experience a little more complete. Now you can retrieve things from the server, check email, and do a little Web surfing, all while connected with ARA.

The new ARA has a familiar feel. In fact, the Apple Remote Access Personal Server control panel looks suspiciously like the Open Transport PPP control panel—for good reason. Apple rolled all



ADD YOUR HOME MAC to your local-area network at the office with the improved Apple Remote Access Personal Server.

OT/PPP and ARA functions into it. No need to use two control panels to switch between an Internet service provider and the ARA server. Instead, simply open ARA, select a configuration, and click Connect.

In all our tests, use was both stable and a snap. Not only were we connected to our local-area network (as if sitting at an office Mac), but the entire Internet was available through our company's connection. Connecting with a 28.8Kbps modem provided near-maximum speeds, and files copied to the remote Mac at faster than 3 kilobits per second—not blisteringly fast, but hey, it was a 28.8Kbps modem. —David Reynolds



GOOD NEWS: Easy installation. Solid performance. Allows either AppleTalk Remote Access Protocol or PPP. Great background operation. Control Strip module and handy AppleScripts included.

BAD NEWS: A few setup quirks.

Surf Express 1.1

COMPANY: Connectix

CONTACT: 800-950-5880 or 650-571-5100, <http://www.connectix.com>

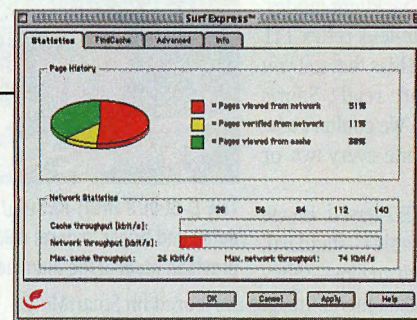
PRICE: \$33 (street)

REQUIREMENTS: PowerPC, System 7.5 or later, 16MB of RAM, 12MB of free hard disk space, CD-ROM drive, Open Transport 1.1.2 or later, TCP/IP-based Internet connection, Netscape Navigator or Microsoft Internet Explorer versions 3.0 or later

If you've ever screamed in frustration as your browser downloaded a recently visited page rather than grab it from cache, you'll appreciate Surf Express. It replaces your browser's cache with a more efficient version and can even retrieve pages before you ask for them.

The Surf Express CD-ROM installs an extension and two applications. From then on, whenever you launch your browser, a proxy server intercepts all browser traffic and saves the pages to its own cache. If you return to a page, you can view it from the Surf Express cache much more quickly than you would if it had to download again, and almost three times faster if from Netscape or IE's built-in caches. Furthermore, it stores up to seven times more data in the same amount of hard disk space (an average of 200 pages in 10MB).

Surf Express's SmartFetch feature makes the most of idle times by automatically downloading changes to your most frequently visited pages, so subsequent requests are served in a snap. Occasionally Surf Express serves outdated pages, but clicking Reload downloads the latest data.



SURF EXPRESS TRACKS the percentage of pages viewed from the cache versus those viewed from the network, as well as the throughput for both.

Surf Express works invisibly, but it comes with a control panel that displays statistics and provides the flexibility to tweak settings (even though the defaults are fine for most users). An invaluable feature is FindCache, which shows the date, title, and URL of forgotten pages containing words or phrases you've specified. Searching hundreds of pages takes only seconds, and viewing pages is almost instantaneous because they're coming from cache. This alone is worth the price of the package.

Surf Express won't work miracles (forget about Connectix's "36 times faster" claim), but it does make the most of your modem by popping pages into place, pronto. The slower your modem and the more predictable your browsing routine, the more you'll benefit from Surf Express. —Owen W. Linzmayer



GOOD NEWS: Cross platform. Fast, efficient cache a no-brainer to use. Useful search feature. 30-day guarantee. Inexpensive.

BAD NEWS: Speed boost overstated. Sometimes serves dated material.

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reviews

That's Infotainment

The Star Trek Encyclopedia: A Reference Guide to the Future

COMPANY: Simon & Schuster Interactive

CONTACT: 800-910-0099 or 303-739-4020,

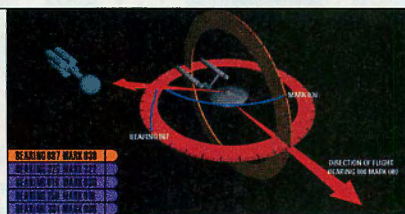
<http://www.simonsays.com>

PRICE: \$39.95 (SRP)

REQUIREMENTS: PowerPC, System 7.5 or later, 16MB of RAM, 4X CD-ROM drive, 640-x-480-pixel monitor with 256 colors or better



This four-CD package includes not only an exhaustively cross-referenced alphabetical lexicon, but also illustrated features,



video clips, a comprehensive timeline, and episode guides for *The Next Generation* and the first five seasons of *Deep Space Nine*.

The CD-ROMs incorporate all the information of the printed encyclopedia in an accessible format. The text is tarted up with the now-familiar *Next Generation* interface, and you get ubiquitous hyperlinks, full-text searches, and the odd photo or QuickTime snippet. Even better is the Resources section, with in-depth features on subjects including Starfleet uniforms and insignia, exhaustive lists of Starbases and Trekkian food and beverages, and animated diagrams such as a blow-by-blow of the relativistic "Picard maneuver." The episode guides, which make up two of the package's four discs, are less remarkable—though you do get gossipy production notes and a QuickTime version of each episode trailer.

In a nod to the fannish origins of the Trek canon, the encyclopedia encourages you to append your own notes and essays. The authoring process is a bit crude, but it lets you create articles, complete with links to the encyclopedia and episode guides, that you can trade with your fellow Trekkies. This multimedia compendium goes all out to meet the demands—the *needs*—of even the most hard-core fans.—Mark Simmons

The Official Guide to Babylon 5

COMPANY: Sierra On-Line

CONTACT: 800-757-7707 or 425-649-9800,

<http://www.sierra.com>

PRICE: \$29.95 (SRP)

REQUIREMENTS: 100MHz PowerPC or faster, System 7.1 or later, 16MB of RAM, 4X CD-ROM drive, 640-x-480-pixel monitor with 256 colors or better



Sure, this one isn't as encyclopedic as its Trek equivalent. But then again, J. Michael Straczynski's new-generation sci-fi series has a lot less material under its belt—just 4 seasons to the Trek franchise's 20 (not to mention all those movies). Like the series itself, this CD-ROM reference compensates for its smaller scope with high production values and fancy effects, not to mention a nifty enhanced

CD with a selection of Christopher Franke's incidental music.

Babylon 5's universe, smaller and more coherent than the sprawling Trek continuity, lends itself well to an in-

depth treatment. But, with the exception of the survey of alien species, which provides details on the social and political structures of each alien race, the informational content is low. You get biographies of the key characters and catalogs of ships and weapons, but not diagrams of the eponymous station, timelines, or other factoids. Every included item, however, is accompanied by generous helpings of high-quality video.

Some of the bonus features may also strike less ardent fans as cheesy. The pop-up guides are fun, but I can't say I got too much out of the "BabCom 5" sound-bite salad or the audio gallery of warning klaxons. All in all, the content seems calculated more to tickle the fan-cies of B5 addicts than to inform dilettantes.—MS

Movieke

COMPANY: Bandal Digital Entertainment

CONTACT: 888-992-9000 or 714-816-9700, <http://www.bdec.com>

PRICE: \$29.95 (SRP)

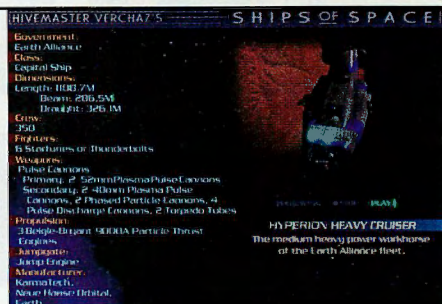
REQUIREMENTS: 68040 or faster, System 7.0 or later, 8MB of RAM, 4X CD-ROM drive, monitor displaying thousands of colors or better, microphone



It's karaoke meets Mystery Science Theater 3000! You and a couple of (ideally, intoxicated) friends dub over the dialogue in classic movie clips, then play it back amid howls and guffaws. In practice it turns out to be good for some cheap laughs, but

the execution leaves a lot to be desired. For starters, you get a paltry dozen movie snippets, all grainy and low-resolution, and almost all from deservedly obscure films. We're not talking *Citizen Kane* here, folks; Ed Wood's *Glen or Glenda* is the biggest camp classic among them.

The interface is also awkward. Not only is it hard to read (or deliberately ignore) your lines while watching the screen, but entire blocks of dialogue are highlighted en masse. A conventional bouncing ball would help keep track of who says what when. Dennis Miller's virtual hosting is also annoying, but I suppose somebody's babbling has to break the ice.—MS



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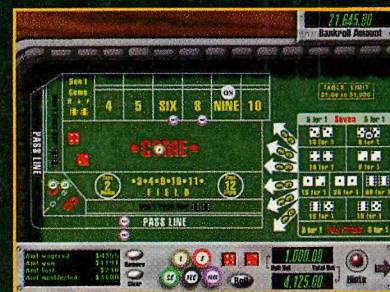
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System Requirements: Any Macintosh running system 7.0 or higher with at least
4MB RAM, CD-ROM drive and 256-color monitor (thousands of colors recommended)
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Kidz Stuff

Brisbane Elementary kids put children's software to the test before handing out the grades.

Ariel's Story Studio

COMPANY: Disney Interactive

CONTACT: 800-900-9234, <http://www.disneyinteractive.com>

PRICE: \$34.95 (SRP)

REQUIREMENTS: 68040 or faster, System 7.1 or later, 16MB of RAM, 2X CD-ROM drive



Ariel, the charming little mermaid in Disney's hit animated movie, becomes human once again in this interactive version of the story that made her famous. Ariel, Sebastian, and the disgustingly evil Ursula take turns reading aloud while kids click along to learn new words, sing along with songs from the movie, watch film clips, and get creative

with under-the-sea games and activities. Those who already know the love story by heart can make up their own storybooks using backgrounds and characters from the movie.

GOOD FOR GRADES: 1 to 5

LIKES: "I like it when it started to sing, it was funny."

■ Michelle

"I liked the place where you could make your own place using plants and fish to decorate it." ■ Amanda

"I like how you get to explore about the sea and listen to what Ariel says." ■ Mandy

DISLIKES: "I didn't like how Ariel called a fork a dinculhopper." ■ Bruno

"The animation and how they had them talk in the bubble." ■ Jimmy

SOUND ADVICE: "I would take out kissing. Also change the clothes and how they look." ■ Kiah

FINAL REPORT: Ariel is the catch of the day.

Meet the players...



KIAH BUCHNER, Age 10, Grade 5
EXPERTISE: Boogie boarding
PICK OF THE MONTH: JumpStart 5th Grade



TRACI NOWAKOWSKI, Age 10, Grade 5
EXPERTISE: Snow boarding
PICK OF THE MONTH: Anastasia: Adventures With Pooka and Bartok



MICHELLE GOODWIN, Age 10, Grade 5
EXPERTISE: Stickers
PICK OF THE MONTH: I Spy



BRUNO BOVO, Age 10, Grade 5
EXPERTISE: Skydiving
PICK OF THE MONTH: Ariel's Story Studio



MANDY MORALES, Age 10, Grade 5
EXPERTISE: Surfing
PICK OF THE MONTH: I Spy



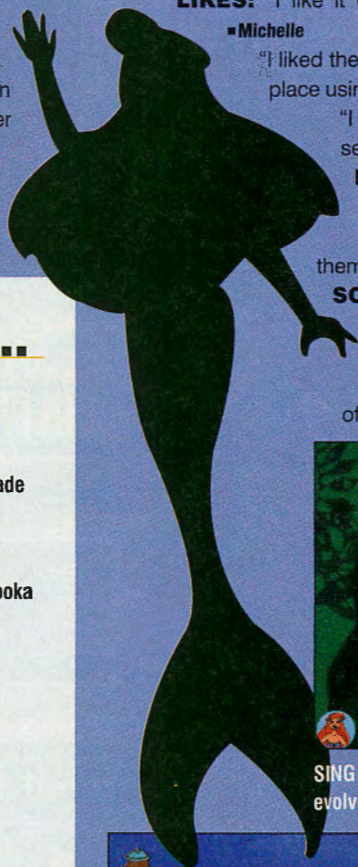
JOLIE LAU, Age 11, Grade 5
EXPERTISE: Snowball fighting
PICK OF THE MONTH: I Spy



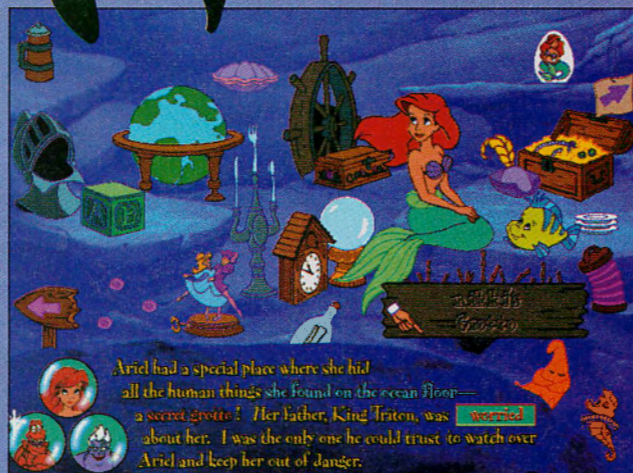
JIMMY LASSUS, Age 10, Grade 5
EXPERTISE: Money
PICK OF THE MONTH: Carmen Sandiego Word Detective



AMANDA OLSON, Age 10, Grade 5
EXPERTISE: Skiing
PICK OF THE MONTH: Carmen Sandiego Word Detective



SING ALONG with your favorite songs as Ariel evolves from a little mermaid to a young woman.



Ariel had a special place where she hid all the human things she found on the ocean floor—a secret grotto! Her father, King Triton, was worried about her. I was the only one he could trust to watch over Ariel and keep her out of danger.

DISNEY'S RECYCLED FISH TALE feeds kids' creative appetites by filling their plates with synonyms, stories, cute clickables, and deep sea games.

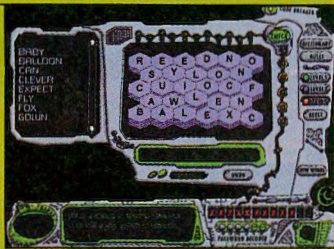
Carmen Sandiego Word Detective

COMPANY: Brøderbund Software

CONTACT: 800-548-1798 or 415-382-4400, <http://www.brøderbund.com>

PRICE: \$34.95 (SRP)

REQUIREMENTS: 20MHz 68040 or faster, System 7.1 or later, 8MB of RAM, 2X CD-ROM drive



SNEAKY THIEF forces kids to spell for A.C.M.E. agents' relief.

Carmen Sandiego, the infamous one-woman crime wave, is determined to have the last word as she turns A.C.M.E. agents into gibbering idiots with her devious new invention, the Babble-On machine. Twelve agents already have fallen prey to her play. You must return their freedom of speech by collecting keys to the machine through spelling, grammar, and vocabulary games while uncovering clues in Carmen's creepy V.I.L.E. hideouts.

GOOD FOR GRADES: 3 to 6

LIKES: "I liked that the games had three levels so anyone could play." ■Amanda

"The game is cool, and it has good graphics. It was fun to play." ■Jimmy

"I liked how everything was mysterious. I also liked how everything was dark." ■Traci

DISLIKES: "I don't like the game because it didn't teach me that much." ■Jolie

"I didn't like some of the games because they were hard." ■Bruno

SOUND ADVICE: "I would make harder words for my grade level." ■Mandy

FINAL REPORT: Carmen steals the show once again.

The Oregon Trail 3rd Edition: Pioneer Adventures

COMPANY: The Learning Company

CONTACT: 800-227-5609 or 617-494-1200, <http://www.learningco.com>

PRICE: \$49.95 (street)

REQUIREMENTS: PowerPC or faster, System 7.5 or later, 16MB of RAM, 4X CD-ROM drive



Young pioneers will want to hitch up the wagons and hit the Oregon Trail in this revamped version of the popular history title. The trail starts in Independence, Missouri, where you pick your travel partners and outfit your wagon. Once you're on the trail, you've got to ration your supplies while making the crucial decisions necessary to keep you and your companions happy and healthy all the way west. A helpful handbook loaded with tips and facts proves a vital resource for greenhorns and old coots alike.

GOOD FOR GRADES: 5 to adult

LIKES: "I liked how we got to go hunting." ■Bruno

"I like the trail and how fun it is to travel to Oregon." ■Kiah

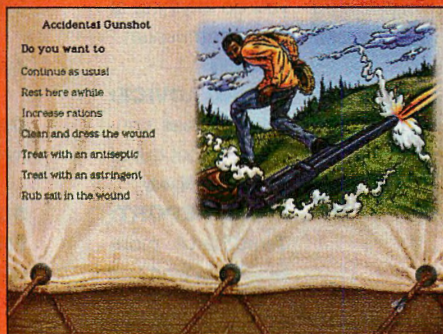
"I liked that the people were lifelike. I also liked that they talked Western." ■Jimmy

DISLIKES: "It is hard to get out of a store or a hotel." ■Jolie

"It won't let you go on the real trail without talking to a fake Western person for 20 minutes." ■Mandy

SOUND ADVICE: "Make the people react faster when you click on them." ■Amanda

FINAL REPORT: Westward, ho!



TRAILBLAZING HISTORY TITLE puts the Old West into perspective for young pioneers.

I Spy

COMPANY: Scholastic

CONTACT: 800-724-6527 or 212-343-7100, <http://www.scholastic.com>

PRICE: \$29 (street)

REQUIREMENTS: 33MHz 68LC040 or faster, System 7.1 or later, 7MB of RAM, 2X CD-ROM drive



There's not much to this game—no complicated plots, no confusing adventures, no annoying animal hosts—just plain, simple fun. Kids pick from eight basic puzzle themes, such as Oops Hoops, in which they place objects in matching hoops, and Balloon Popper, in which they search out and deploy the missing part of machinery needed to pop a balloon. Kids can replay each puzzle over and over with different words or can make their own I Spy puzzles to boggle their friends.



KIDS PLAY DETECTIVE as they spy for objects hidden in a puzzling mirage of clutter.

GOOD FOR GRADES: K to 5

LIKES: "I like how you can make your own I Spy." ■Jolie

"I liked how you got to choose an activity you like the best and do a lot of games, the kind you choose." ■Mandy

"I liked the graphics. I also liked how they gave you the clues." ■Traci

DISLIKES: "Some of the really easy things to find were too easy to find." ■Kiah

"It was sort of hard, and they should have easy, hard, and medium levels." ■Jimmy

SOUND ADVICE: "Make harder levels." ■Amanda

FINAL REPORT: I spy a hit!



CLASSIC WORD SEARCH GAME woos kids with simplicity, charms nostalgic parents.

JumpStart 5th Grade

COMPANY: Knowledge Adventure

CONTACT: 800-542-4240 or 818-246-4400, <http://www.adventure.com>

PRICE: \$29.95 (SRP)

REQUIREMENTS: 25MHz 68040 or faster, System 7.1 or later, 8MB of RAM, 2X CD-ROM drive



Dr. X is out to destroy Hooverville, and he may get away with it if you don't help kid detective Jo Hammet stop him. You'll need to mine your knowledge of art history, geography, science, and math to get to the bottom of this case, but you need to start with the right questions. If you don't ask the correct questions in the correct order in the opening museum scene, you'll be stuck staring at the same two pieces of art for eternity, or at least until you call tech support.

GOOD FOR GRADES: 4 to 5

LIKES: "The games had challenging questions to answer." ■ Amanda

"The little rat and how he talked. He had a big attitude." ■ Traci

DISLIKES: "When you get into one room, it's hard to get into another." ■ Jolie

"It was a stupid start—they should have put more action." ■ Jimmy



JUMPSTART'S TOUGH OUTER SHELL makes it difficult to reach its inner educational goodness.

"It wouldn't let you do anything at the art museum."

■ Michelle

SOUND ADVICE:

"Make it less confusing to get out of a room." ■ Mandy

FINAL REPORT:

JumpStart's more like RockyStart.

Math Grade 5: The Mission Masters Meet Mudflat Moe!

COMPANY: McGraw-Hill Home Interactive

CONTACT: 800-208-1012, <http://www.mhhi.com>

PRICE: \$29.95 (SRP)

REQUIREMENTS: 68040 or faster, 16MB of RAM, 2X CD-ROM drive



CORRUPT BUSINESSMAN gives math meaning to young do-gooders on a mission.

GOOD FOR GRADES: 4 to 5

LIKES: "I liked how you got to pick a code name." ■ Bruno

"I liked the mutant-maker machine because you had to figure out what kind of body parts it needed to help." ■ Amanda

"I liked everything. This was a great game." ■ Traci

DISLIKES: "I didn't like how you have to get transferred to a different place every time you play a game." ■ Jolie

"They should put a new guy on the cover." ■ Jimmy

SOUND ADVICE: "I would put in more math." ■ Kiah

FINAL REPORT: Meddling kids, evil villains, and radioactive rats—you do the math.

Mudflat Moe gives business a bad name as he tries to destroy the environment with factory sludge. Daring detectives with a mind for math pick code names and head for the Smart Center, where they report to the Training Desk for tutoring, the Mission Desk

for math assignments, or the Reporting Desk to track their progress.

Anastasia: Adventures With Pooka and Bartok

COMPANY: Fox Interactive

CONTACT: 310-369-3900, <http://www.foxinteractive.com>

PRICE: \$34.98 (SRP)

REQUIREMENTS: 66MHz 68040 or faster, System 7 or later, 8MB of RAM, 2X CD-ROM drive



With a peek at Anastasia's journal, you learn that she's yearning to get to Paris to find her family. Thus begins the beautifully rendered yet dull adventure in which you're forced to bark your way across Europe as Anastasia's dog, Pooka, solving challenges as they arise. Be careful. If you put your nose in the wrong demon's business, you'll need to play your way out of the Underworld's Cave of Choice to continue on your tedious trip.

GOOD FOR GRADES: 3 to 5

LIKES: "I liked the bat, Bartok." ■ Amanda



DELIGHTFULLY 3D. Anastasia pays the price for beauty by being beastly slow to play.

"I liked how the bat dropped a brick on the dog's head." ■ Bruno

DISLIKES: "How slow it takes to move." ■ Kiah

"It takes too long to click on things." ■ Michelle

SOUND ADVICE: "Don't make the Anastasia characters be in it." ■ Mandy

FINAL REPORT: Muzzle this dog.

Kingdom II: Shadoan

COMPANY: TIG Publishing LLC

CONTACT: 619-566-1900, <http://www.tigsd.com>

PRICE: \$29.95 (SRP)

REQUIREMENTS: PowerPC or faster, System 7.0 or later, 8MB of RAM, 4X CD-ROM drive



TYPICAL MEDIEVAL HERO STUFF comes complete with black magic and a damsel in distress.

As Lathan, apprentice to the wizard Daelon, it is your task to win back the lost Dagger of Arne and the missing Crown of Malric in order to defend the kingdom, defeat the malevolent meanie Torlock, and save the Princess Grace Delight from utter and sure despair.

GOOD FOR GRADES: 5 and up

LIKES: "I liked the part where the old man kept hitting and poking the other man. I kept playing it over and over!" ■ Michelle

"I liked how the weapons looked." ■ Bruno

"I like how you have to look at maps and go through doors." ■ Jolie

DISLIKES: "All you did was click him to places." ■ Amanda

"All you do is click on doors to get out of the room and watch fake weird people poke each other and talk." ■ Mandy

SOUND ADVICE: "The people should move faster." ■ Jimmy

FINAL REPORT: Harder to play than a stringless harp.



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powerplay

Think "Wow" about our Macworld Expo roundup: Steve said, "Games!"



Find a QuickTime movie of the video played during Steve Jobs's keynote, Jump Zampoli, Mars Rising, and demos of more games on The Disc!

A while ago (Oct/97, p96), we berated Apple for having zero presence at the Electronic Entertainment Expo. We were also amazed at statements made by a certain former executive vice president of marketing. Being told that "nobody can make money selling software for less than \$40" and to use a PC compatibility card to play games on the Mac struck us as nothing less than astounding—astoundingly idiotic. What a difference six months make.

Directly countering such outrageous statements in his keynote at the January Macworld Expo, Steve Jobs said, "I guess some of our prior management didn't like games very much. But the current management really likes games, and we're dedicated to getting some really great games on the Mac." He turned over the latter half of his speech to four Mac developers, the last of whom was Rand Miller of Cyan, who briefly demoed Riven, the sequel to Myst (see review, Feb/98, p52).

Exploiting Apple's marketing campaign, Jobs framed the Riven demo as "Think Wow." We did indeed think "Wow!" when we saw a game as part of an Apple presentation.

To finish off the keynote, Jobs showed a video of 50 or so new products being shown at the Expo, which included snippets of Bungie Software's Alexander Seropian saying, "The Mac kicks ass," and MacSoft's Peter Tamte holding up the number-one-selling Mac game, Civilization II. We hope Apple does work to get more games on the Mac. In addition to being great time-wasters,

games are one of the fastest-growing areas of content creation, one of Apple's traditional strengths.

There was to be an entertainment pavilion at the Expo, but it disappeared. That didn't mean there was any lack of gaming news; plenty of stunning products will be available in the months to come. We are both excited and worried about a feat of engineering by Insignia Solutions and TechWorks. Sometime after mid-February, owners of both Insignia's RealPC and TechWorks' Power3D

"Current management really likes games, and we're dedicated to getting some really great games on the Mac."

Steve Jobs



accelerator card can download a free enabler that lets games take advantage of the Power3D card directly. Games such as Tomb Raider II will be able to use the card to draw graphics to the screen, saving emulation for the actual game engine. We saw Tomb Raider running at very good frame rates and were itching to play. What worries us is that PC game vendors now have one more reason not to make Mac versions of their games.

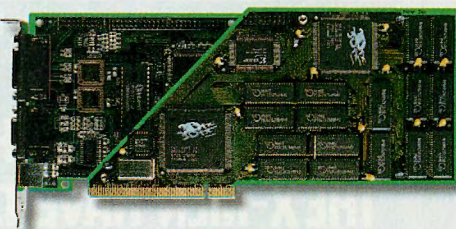
On the other hand, we also saw a reason PC vendors should make Mac versions. It used to be that Macs had the best graphics display hands down. Unfortunately, the PC has leapt ahead, especially with 3D graphics acceleration. Village Tronic, a German company that has its roots in the Amiga, aims to put the edge back into Mac graphics. The company's Mac Picasso card with 3D Overdrive sports a nifty design (look for a review in an upcoming issue). With 12MB of VRAM (4MB 2D and 8MB 3D), the card is absolutely astounding: because it uses the 3Dfx chipset, it gets great performance. The developers talked to the



IT'S A LOT SAFER to bet in MacSoft's Play to Win Casino than in Vegas. Wish someone would give me a \$25,000 bankroll.

Mac programmer for Unreal, one of the most hyped games of 1998, and it looks like they might be able to make it look better on the Mac than on the PC. Woo-hoo! But with prices of \$200 for the Mac Picasso and \$500 for the 3D Overdrive module, Village Tronic won't put TechWorks out of business anytime soon.

Speaking of Unreal, MacSoft says the Mac version should be out shortly after the PC version. Its monsters are absolutely gorgeous. If you didn't buy a 3D card for Myth, you have to buy one for Unreal. The game is downright ugly without acceleration. MacSoft also plans to release ten outstanding games for 1998. Right out of the gate are Play to Win Casino and Deadlock. The end of January will see the XMen conversion for Quake and Top Gun. That's four before we even reach February! MacSoft may also fund development of a shareware version of QuakeWorld. See "In other news..." for more entertaining Expo news.—KT



THE 3D OVERDRIVE module plugs into the Mac Picasso card, creating a real screamer. (It'll take up two PCI slots.)

Shareware

Mars Rising

COMPANY: Ambrosia Software

CONTACT: 800-231-1816 or 716-325-1910,

<http://www.AmbrosiaSW.com>

PRICE: \$20

Ambrosia's latest is a boffo space shooter. Basically, you shoot things in front of you with guns and below you with bombs. While that ain't exactly a new concept, it makes for an immediately immersive experience: the fewer the controls, the easier it is to jump right in. And you will want to jump right in—although reminiscent of early 80s arcade shooters like Sega's *Zaxxon*, the artwork blows away anything made 15 years ago.

Like all Ambrosia arcade games, *Mars Rising* has an absurdly complex plot. Not content to just say "Shoot that! It's fun!," the company insists on weaving a story with more plot than your average *Trek* episode. Mars Colony has declared independence from Earth, and contrary to every other space epic, you are on the side trying to get it back. Kill the Martians

WE'LL ADMIT IT, there's no way we made it to level 17. This screenshot comes with the program. Look at all the pretty colors.



YEAH, GET THAT THING over there. Hurry, the fate of Earth hangs on it!

before they take over Deimos! The registered version of *Mars Rising* has 28 levels and lets two people play.—KT

Jump Zampoli

COMPANY: RampZamp

CONTACT: <http://www.rampzamp.com/>

PRICE: \$20

We haven't seen anything so cute and adorable since Psygnosis's *Lemmings*. Jump Zampoli's main characters are the Zampolis—a troop of acrobatic gnomes. The designers specifically made the game nonviolent, choosing humor over death.

The object of the game is to make your Zampolis pop balloons. Along the bottom of the screen runs a seesaw, which you use to aim the Zampolis. In some respects, this works the way *Breakout* does, but it's much funnier. Some balloons contain more bal-

AT THE END of each level, you have to bounce your Zampoli into a vortex to get to the next level.

loons, others make the Zampolis bounce off, and, of course, you get special bonus balloons. All the while, the cute gnomes clap to the music (which is also reminiscent of *Lemmings*) and do amazing flips as they fly through the air with the greatest of ease. This is a charming game, suitable for all ages.—KT



TURN THE SEESAW to aim the Zampolis at the balloons.



In other news...



Bungie Software papered the Expo, attendees, and anything that moved (or didn't) with Myth stick-ers. Upcoming in the future: the company is working on a game that'll make Myth look like Pong....Blizzard demoed *Diablo* and *StarCraft*. The former should be available as you read this. Mac *StarCraft* has slipped behind the PC version as the Mac developers finish up *Diablo*, but it should be out two months after the PC version, at the latest....Logicware is publishing Mac versions of *Shattered Steel*, *Killing Time*, and *Tempest 2000*....Delta Tao has shipped Eric's Cascade and is a few months away from releasing *Clan Lord*....Feral Entertainment will distribute *Racing Days R* itself at the moment....Connectix's *Virtual PC 2.0* adds better DirectX support....TechWorks demoed the 3Dfx version of Aspyr's *Carmageddon*....ATI will release drivers that greatly boost performance of its latest cards....Also seen at ATI's booth was *Nightfall*, from Altor Systems. This game uses the first-person perspective you find in *Quake*, but it's an adventure game with an emphasis on plot and puzzles, instead of shooting. Unlike *Riven*'s static vistas, *Nightfall*'s 3D scenes are dynamically rendered.—KT



how to Publicize Your Web Site

"Gort! Klaatu barada nicto!" Robots can be your Web site's friends.

*Professor Web,
I've submitted the URL of my Web site to the big search engines. Is there anything else I can do to improve the number of visitors?*

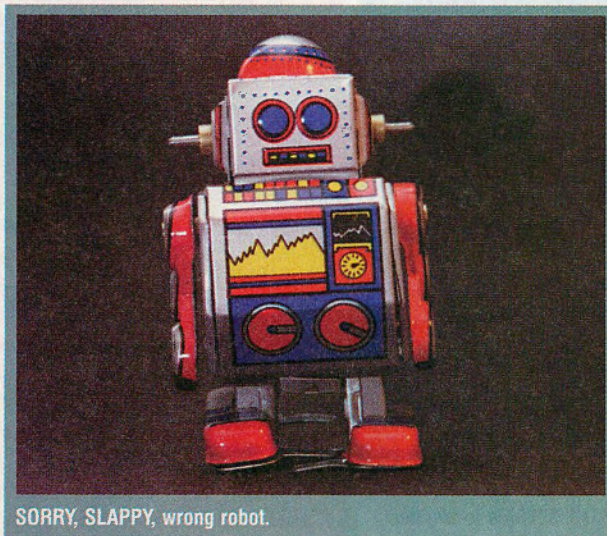
—EARL

Egad, Earl! You mean visitors aren't lined up three deep to gaze upon your Pictorial Tribute to Veterinary Dental Care? How can that be? OK, we'll leave the topic of content for another day. Let's talk about spreading the word. Even the most riveting Web page is a waste of hard drive space if no one knows about it.



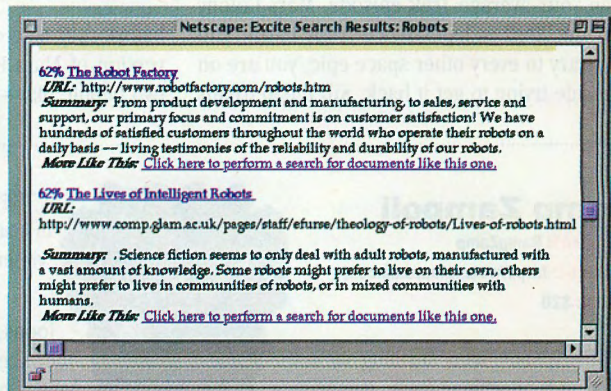
BURIED SOMEWHERE at the bottom of a search engine's main page is a link that lets you submit your own URL.

You've emailed the search engines and you've talked up your site in the newsgroups and mailing lists, and so on and so forth. Today, I want to focus on a really geeky task: making sure your Web site is robot-friendly.



SORRY, SLAPPY, wrong robot.

Robots, aka Web crawlers or Web spiders, are bits of software that reach out across the Web to collect information. A robot follows every link it encounters, attempting to catalog everything out there. The big search engines use robots to find every page on the Web and scoop up all the text and the URLs associated with them, so that when you search for, say, "chickens and lips but not hens or teeth," the search engine matches up the content and hands you the URL.



ROBOT SOFTWARE gathers the text that matches your search request.

When you email your URL to a search site, it sends its robot out to catalog your pages. You want the robot to collect information from your pages, of course, but you also want it to refrain from collecting information that, for one reason or another, should not appear in a search engine—because your pages are personal, because the URLs change quickly, or because your pages disappear quickly.

The major search engines use robots that look for guidance about each page inside a special HTML robot tag, which you place inside your pages' meta tags. These tags belong inside the header section of your HTML page.

Here are the basic *Please Don't Index This Page* and *Don't Follow Links* tags:

```
<meta name="robots" content="noindex, nofollow">
```

And here are the *Please Do Index* and *Do Follow* commands:

```
<meta name="robots" content="index, follow">
```

That's all there is to it. The tags belong inside the header, like so:

```
<html>
```

```
<head>
```

```
<meta name="robots" content="index, follow">
```

```
<title>Newton Beat</title>
```

```
</head>
```

Now for the bad news: many robots don't look for the robot tag. Instead they follow the rules laid out in a robot.txt file at the top level of your Web server's document space. Only a Web server administrator can work at that level. Unless you are the administrator of your Web server, all you can do is contact your administrator and ask if

you can have robot information added to your site's robot.txt file. Uploading your own robot.txt file to your user directory will have no effect whatsoever.

There are a few other less-important wrinkles to taking advantage of robots. Check the HTML Author's Guide to the Robots META Tag at <http://info.webcrawler.com/mak/projects/robots/meta-user.html>.

Final warning: Watch out when you mess with meta tags. Page-creation applications such as Claris Home Page sometimes use these tags to store their own information. A page created with Adobe PageMill, for example, will show this:

```
<meta name= "generator" content="Adobe PageMill 2.0 Mac">
```

You can safely delete the entire tag, but if you try to add information to the tag, PageMill will delete the information or possibly even crash. A page can have more than one meta tag, so ignore or delete that meta tag and create a second one.

And rather than email every search engine with your URL, you can do the whole process at once from a site like Submit It, <http://www.submit-it.com>, which handles 20 engines for free, or many more for a fee.

Background Color Columns

Dear Professor Web,

I would like to know how to create Web pages that have backgrounds with a left-hand border of a different color.

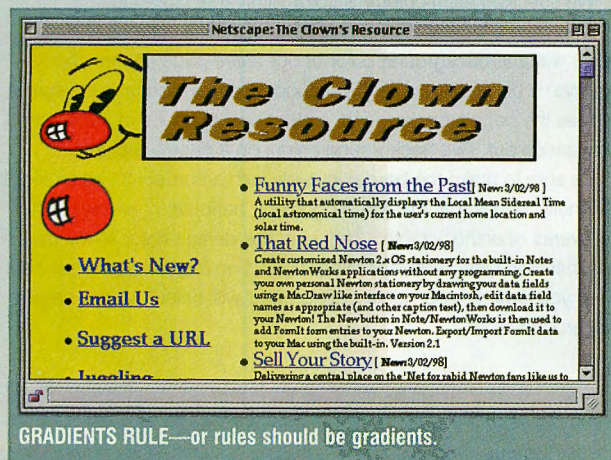
—BENNIE WALTON

Dear Mr. Walton (may I call you Bennie?),

It's actually pretty simple, Bennie. There are three ways to handle this.

Method One: The Color-Band Background

First, let me show you how to make a simple column of color behind your text, like this, which fades left to right:



GRADIENTS RULE—or rules should be gradients.

You can just as easily make it a sharp-edged column of color, but we like that gradient look.

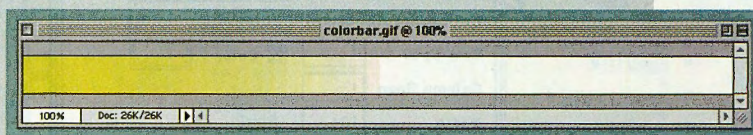
Creating the effect is as simple as using an image for our HTML document's background. To do that, we use the background attribute in our body tag. As you can see, the background attribute points to the actual image file:

```
<body background="images/colorbar.gif">
```

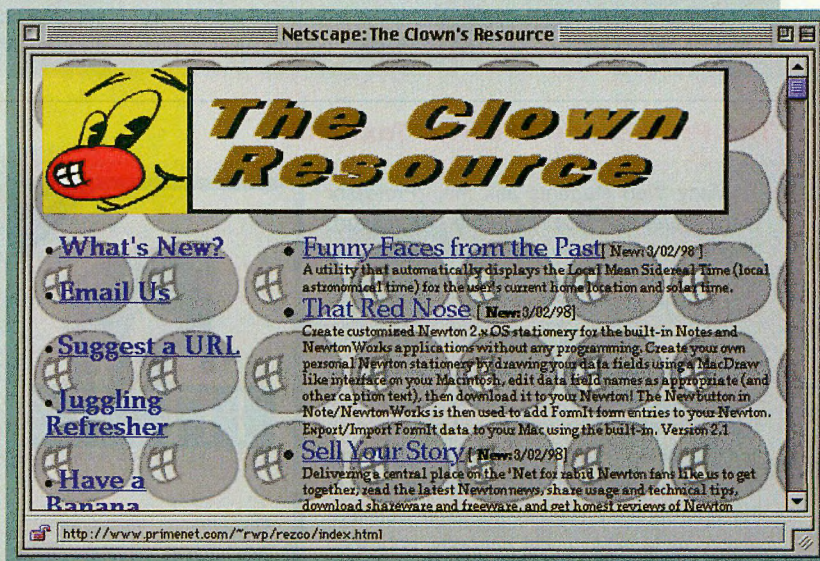
A huge image would fill up the entire visible browser window, but it would take up a lot of space on your server's hard drive. It would also take a long time for your users to download. A small image, however, downloads quickly, and it can repeat over and over, tiling the window background. That's how those logo backgrounds are created, as in the fairly ugly example at right.

Remember this key fact: the smaller your image file, the faster your visitor's browser fills the background. Keep it small in size and color depth.

Now you can use an easy trick to create columns or rows of color with a simple background image. Take a look at this skinny image, which is intentionally wider than most browser windows are likely to be, so it'll tile top to bottom but not left to right.

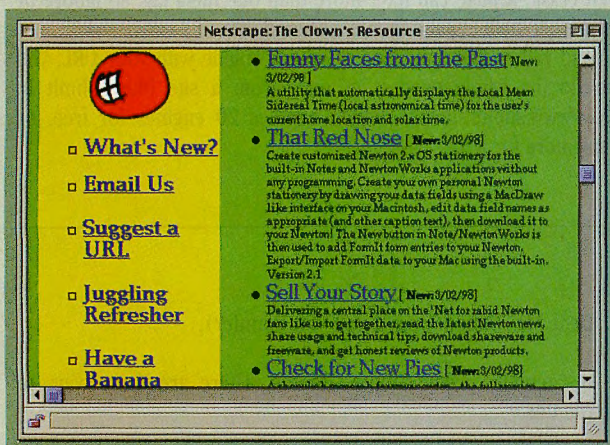


This image repeats down the page, over and over, creating the illusion of a single, solid pattern. To keep it small, you can actually make it only a single pixel tall—we made it thicker so it would show up in this magazine! This image gives our page a color band on the left, and it loads quickly.

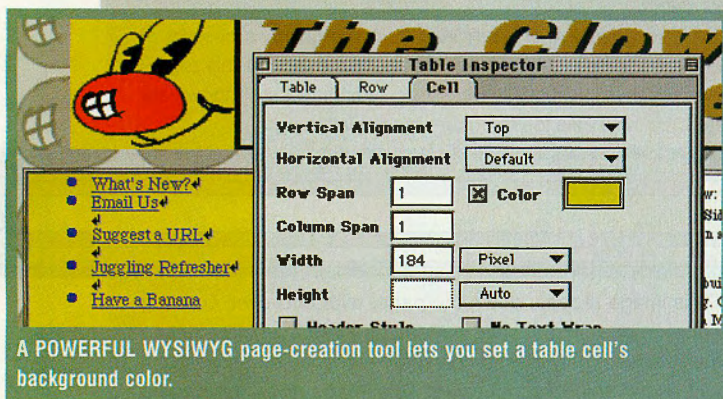


Method Two: The Colored Table Cell

Now let's look at how to put a column of color behind a left-hand column of text.



As you might guess, this is done simply with tables. Both the text and the background color (not an image) are contained in the left column of a table. It's simplest to create a table in a WYSIWYG page-creation tool like GoLive CyberStudio 2, and that also makes it easy to add a background color to individual cells of the table.



A POWERFUL WYSIWYG page-creation tool lets you set a table cell's background color.

That's how we colored the backgrounds in our example. For you hard-core HTML coders, here's a simplified version of the HTML:

```
<html>
<head>
<title>The Clown's Resource</title>
</head>
<body bgcolor="lightgreen" link="#000099"
vlink="#808080">

<table border="0" bgcolor="lightgreen">
<tr>

<td bgcolor="yellow" width="190">
[We put the content of the left column here.]
</td>

<td bgcolor="lightgreen">
[We put the content of the right column here.]
</td>

</tr>
</table>
</body>
</html>
```

We specified each column's color within the `<td>` tags.

Now take a look at the *second* column's color scheme and compare it with the background color of our entire page (in the `<body>` tag). We've purposely made the second, right-hand column the same color as the page's background, so that only the color of the left column stands out. Two background colors on a page are plenty.

Be sure to make the border invisible with a `border="0"` attribute.

Finally, notice that the first `<bgcolor>` attribute, contained within the overall opening `<table>` tag, sets the default color for all table cells that aren't otherwise specified. There's no requirement to set it at all—if you omit it, your table background will default to the page's background color.

Method Three: Frames

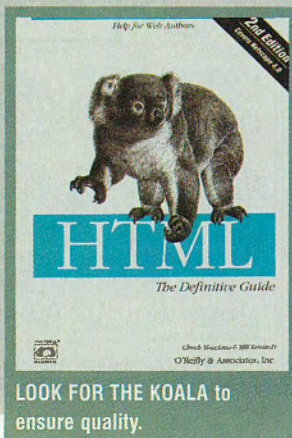
This one, exemplified by the *MacAddict* site, is self-explanatory. Your left frame simply points to an HTML document that uses a differ-

ent color background than the rest of the page and the other frames. If you know how to do frames, I don't need to tell you anything more.

The Professor's Favorite Textbook

Many Web students ask me, "Professor Web" (please, just call me Professor), "Professor Web," they say, "what book do you turn to when you need the definitive answer on HTML?"

There sure are a lot of books on creating a Web page, from *Learn HTML in Less Than 45 Seconds* to *Make Money on the Web or Die Trying*. To tell you the truth, most of them do a fine job. When I need to know the ins and outs of some esoteric bit of HTML, however, I turn to the appropriately titled *HTML: The Definitive Guide*, by Musciano and Kennedy, published



by O'Reilly & Associates. No funny talk, no tutorials, no fluff—the book is extremely clear and comprehensive, and it covers everything from the basics of backgrounds to the newest code for style sheets. My copy is dog-eared from use.

Joseph O. Holmes would love to hear your tips and questions on Webmaster topics. Send email to professor.web@pobox.com, but please remember, he can't personally reply to every message.

Stop Playing Games!

(It's time to do your taxes.)



Get MacInTax on the MacAddict CD!



How MacInTax works:

- Answer the quick and simple interview questions (**Save Time**)
- MacInTax fills out forms and performs calculations for you (**100% Accuracy Guaranteed**)
- MacInTax reviews your return for errors and missed deductions (**Save Money**)
- Print completed, ready-to-file forms on the plain paper in your printer (**Easy!**)
- Electronic filing option available (**Fast Refunds**)

MacInTax major awards:

MacWorld Editor's Choice
ComputerLife 5 Stars

MacUser 4.5 Mice
C/Net - BuyIt

CD-ROM Today Critic's Choice



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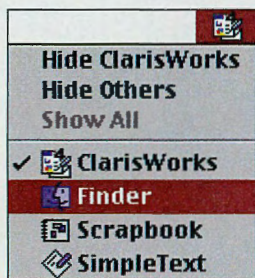


know it all

how to



FIND BBEDIT LITE and the Type/Creator Database on The Disc.



The Macintosh needs specific information about its files and applications to make sure that icons show up properly and that applications and documents are properly linked. The Finder does this coordination work.

You might be surprised to learn that the Finder is an application that's always running. It draws windows, shows the contents of folders, displays icons, and makes a Mac a Mac. If a file has a generic icon, it

means the Finder didn't know what icon to give it. For a file to be assigned a specific icon, the Finder has to know what kind of file it is. The Finder maintains a database that matches icons to file types. That database is the invisible Desktop DB file (which gets rebuilt if you hold down Command-Option at startup).

The Desktop database gets its data from the Finder, and the Finder gets that data from the files themselves. The information the Finder gets with each file is in the form of two four-character codes, known as the Type and Creator codes, which enable the Finder to show the correct icon and launch the appropriate application when you double-click on the file. —Buz Zoller

WARNING!

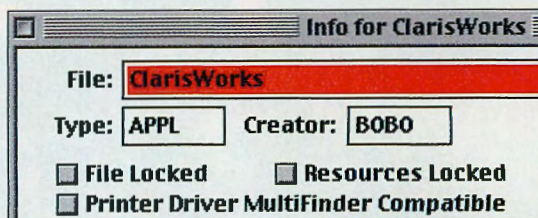
Be extremely careful when changing a Type or Creator code. We recommend doing it only under extreme duress. Changing these codes can damage a file beyond repair. Undoing the changes made to the Type and Creator should revert a file, but nothing is guaranteed when you're manipulating files with ResEdit.

1. The Creator Code

Every file has a four-character Creator code that identifies where the file came from—in other words, what application created it. ClarisWorks has a Creator code of BOBO, so all ClarisWorks documents also have a Creator code of BOBO.

This code is absolutely unique—no other application can use it. Apple keeps a list of all registered Creator codes to ensure that no one uses someone else's code. Apple doesn't release the list, but Ilan Szekey maintains a Type/Creator Database, which is currently at version 3.1 (<http://www.angelfire.com/il/szekey/>).

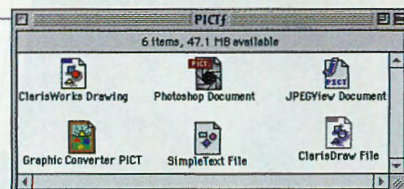
These codes allow the Finder to keep track of all the applications loaded on the Mac. If you've ever gotten a message that said you couldn't open a document because the application that created it could not be found, it was because the Finder was unable to locate the correct Creator code.



2. What About Types?

A Creator code tells the Finder where a file came from, and a Type code tells the Finder what kind of file it is. An application has a Type of APPL, most control panels have a Type of cdev or APPC, and most extensions have a Type of INIT. Lots of applications create generic Types, such as PICT files. The documents pictured at right, all of which have different Creators, have a Type of PICT.

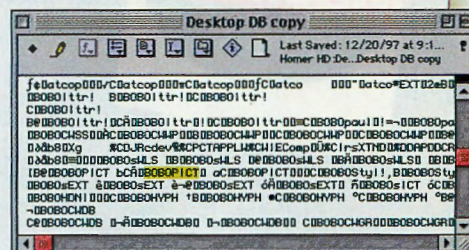
Most Types are specific to the application that created them. Types are basically a signature for the kind of data the document contains. When you save a document by selecting Save As from the File menu, you are choosing a



Type for that document. A Microsoft Word document (MSWD) has a different Type than a ClarisWorks document (CWWP). When you select Open from within an application, only certain items show up as openable, because every application is written to "see" only certain file Types. And it's the Type that either lets you or doesn't let you open a file by dragging its icon onto an application's icon.

3. Putting the Codes Together

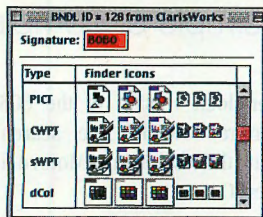
These two four-character codes serve independent purposes, but put them together and they can work magic. With a Creator and a Type, each file has specific information the Finder can use. It can assign an icon, as well as let you double-click a document and launch the correct application. In the invisible Desktop DB file the Finder catalogs the Types and Creators for every file on your Mac that has a Bundle Bit (more on this later). This is what the Desktop DB file looks like opened with BBEdit, a text editor. (Find a shareware version of BBEdit Lite on The Disc.)



Every time you install a new application on your Mac, the Finder updates this database. If the information in the database gets corrupted, or even has an incorrect entry, it may be time to rebuild your desktop.

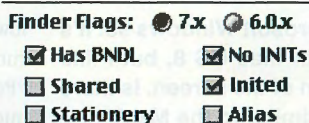
4. So Where Do Icons Come From?

The Desktop DB file is just data, so where do the icons come from? With System 6, the Desktop file actually contained icon resources for all the files. However, with System 7 and later, the Desktop file has been superseded by the Desktop DB file, which tells the Finder where to get the icons instead of giving it the icons. For the Finder to display the correct icon for a ClarisWorks PICT document, it looks up ClarisWorks in the Desktop DB file and learns that ClarisWorks' Creator code is BOBO. It then finds BOBO on the Mac's hard



disk and gets the proper icon from ClarisWorks' Bundle resource.

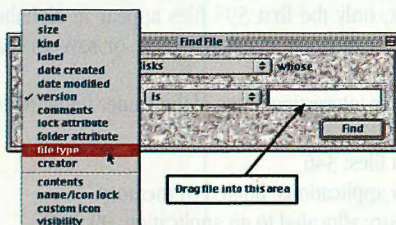
Application programmers are responsible for making sure the application has a Bundle resource and the signature is the same as the application's Creator code. Programmers also must be sure that the Finder knows this Bundle resource exists. They do this by making sure the Bundle Bit is turned on; if this Bit isn't turned on (checked), then it won't be registered in the Desktop database.



5. But This Stuff Is Invisible, Right?

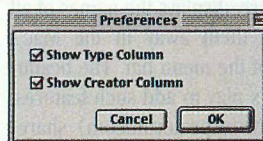
Since the Desktop DB is invisible and the Type and Creator aren't shown in the Finder, how can you look at it? It's important to remember that this information is invisible for good reason—messing with it can cause big problems. So the following information is more of an FYI—please be extra careful! The beauty of the Mac OS is that we don't have to deal with this stuff, but sometimes it's fun to take a look.

The easiest way to find the Creator and Type codes for a certain file is to use Find (Command-F) in the Finder. From the first pop-up menu, choose file type or creator, then drag the file into the textbox on the right side.



If you use Mac OS 7.6 or 8.X, you can also use the Extensions Manager to view the Type and Creator of the items in your System Folder. Just make sure the preferences for Extensions Manager are set to show these attributes.

You can use ResEdit to change the Type or Creator code of a file. Launch ResEdit, choose Get File/Folder Info from the File menu, and navigate to the file you want to edit. This will show



Name	Size	Version	Package	Type	Creator
Control Panels	12.3 MB	—	—	—	—
Appearance	248K	1.0	Mac OS ...	APPC	apcp
Apple Def...ectors	363K	1.0.1	Apple De...	APPC	std2
Data & Time	85K	8.0	Mac OS ...	APPC	tim2
Desktop Pictures	858K	1.0	Mac OS ...	APPC	dkpx

the Type and Creator. For the most part, you won't have to edit these codes, though you might want to if you download a file from the Internet that doesn't have a Type or Creator code (common for PC files). The Mac doesn't know what to do with a file that doesn't have this information. Web browsers are designed to assign these codes to downloaded files (by assigning a helper application, the browser can designate a Creator). However, they can't know every possible file that might be downloaded, so you may need to change these codes.

Buz Zoller (flohead@bga.com) is a Mac manager for a school district in Leander, Texas. He lives in Austin with his wife, Daria, and their dog Marley (<http://www.realtime.net/~flohead/marley.html>). He created the "Didyaknow?" and "...explained" columns for Power Computing. Those articles belong to Apple and are available on Apple's Web site.

4 Tips for Rebuilding the Desktop

1 Rebuilding the desktop only addresses problems with generic icons, aliases that can't find their originals, and "application not found" errors.

2 Make sure the Mac OS Easy Open control panel is turned on when you rebuild the

desktop. Ideally, all extensions and control panels should be off except Mac OS Easy Open.

3 Sometimes all you need to do is restart, rather than rebuild the desktop.

4 For good maintenance, rebuilding your desktop once a month is sufficient.

5 Super tips

how to

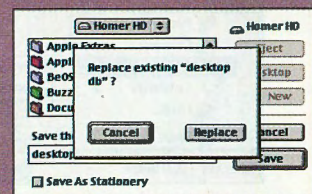
1 If you trade documents with someone who has a PC, make sure to name the file in the DOS eight-dot-three method. If it's a Microsoft Word document, name it something like examples.doc, which will ensure that Windows 95 will register the document as a Word document. The suffix will disappear and the recipient will never know it was created on a Mac.

2 If you try to launch an application on a file server from multiple Macs and get an error that says the file is locked or in use, try turning on the Shared bit. Do this by getting File/Folder info on the application using ResEdit and putting a check in the Shared box.

3 Back up your important files today! This isn't really a tip, but there's no time like the present.

4 Try the supersecret way to completely rebuild the desktop. When the standard method doesn't do the trick, try using Stickies. Because of a little bug in Stickies, you can use it to overwrite invisible files. Launch Stickies (usually found under the Apple menu) and type some text into an empty note.

Then choose Export Text from the File menu. Save the file to the root of your hard drive as "desktop.db."



If you've done it right you should get a message asking you if you want to replace the current Desktop DB file. Click replace. Now quit Stickies and open your hard drive. You should see a text file called "desktop.db." Trash it and restart. The Desktop database will be rebuilt from scratch.

5 Having odd printer/modem port problems? Clear the Chooser cache by holding down Command-Option while selecting the Chooser from the Apple menu.



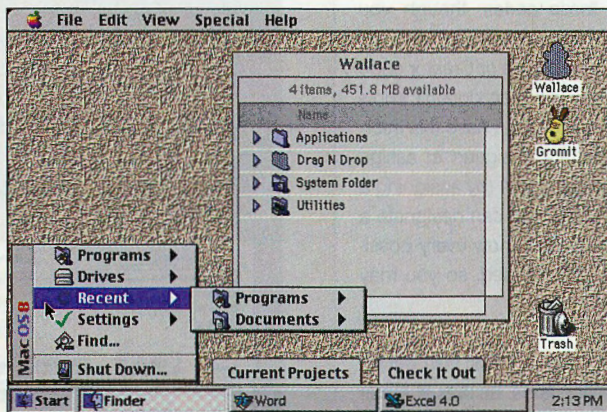
ask us

your questions

We answer your technical questions, no matter how simple or complex.

Q At work I'm forced to use Microsoft Windows 95. It's pretty much a dog compared with Mac OS 8, but I like the task bar it places at the bottom of the screen. Is there some way of adding something similar to the Mac?

A I realize it's heresy to admit as much in a publication named *MacAddict*, but as far as I'm concerned, the Windows task bar is a nice feature worth appropriating. It clearly displays the names of all open applications rather than hiding them away in the Mac's Application menu at the extreme right of the menu bar. The beautiful thing about the Mac is that it's child's play to add such features. Just drag a copy of Proteron's (<http://www.proteron.com>) shareware control panel GoMac into your System Folder and restart. GoMac places a program bar at the bottom of the main screen showing all open applications, allowing you to switch easily with a simple mouse click or keyboard shortcut. You also can drag documents to the program bar to open them with the application of your choosing, or you can select any of the applications listed in the hierarchical Start menu. GoMac requires System 7 and is 100 percent compatible with Mac OS 8.



BRING BRIGHT WINDOWS 95 IDEAS to the Mac with GoMac's program bar, application switching, and Start menu.

Q I know that this is probably a stupid question, but what are the differences between the various models of the PowerPC 603?

A The 603 is a low-power, low-cost version of the PowerPC microprocessor and is intended for notebook computers. With separate 8K instruction and data caches, its performance is roughly comparable to that of the PowerPC 601. The PowerPC 603e, originally called the 603+, is a higher-performance model with a faster clock and 16K caches. Finally, the PowerPC 603ev is a

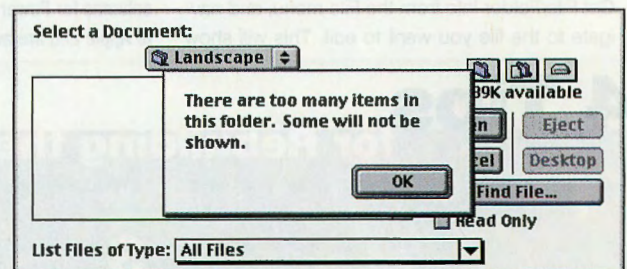
lower-voltage, faster-clock version of the 603e. For a complete rundown of the entire PowerPC line, search for the keywords "PowerPC FAQ" at the following Motorola site: <http://www.mot.com/SPS/PowerPC>.

Q What is the maximum number of files I can put in a folder? What will happen if I exceed this number of files?

A According to Apple, the maximum number of items that can be stored on an HFS (the Mac's standard hierarchical file system) volume is 65,536. It may change with the introduction of HFS+ in Mac OS 8.1, but for the meantime, that's the limit. In list view, the Finder can't display more than 32,000 items in a folder. Double-clicking a folder containing a large number of files can be painfully slow and may result in file names' dropping out, depending on your Mac and the amount of memory it has. The limit is even lower when you open a folder via the standard Open/Save file dialog box. If you try opening a folder containing more than 595 items from within an application, an alert box appears, informing you that "There are too many items in this folder. Some will not be shown." If you click OK to dismiss this alert box, only the first 595 files appear in alphabetical order, though you can open any that appear or save as many files as you like.

Here are some other interesting limits of the Finder under System 7 and OS 8:

- Number of open files: 346
- Number of open applications: limited by memory
- Amount of memory allocated to an application: 99,999K
- Number of volumes on the Finder's desktop: 32
- Number of resources in the System file: 32,767 or 16MB
- Length of pathname: 255 characters, including colons
- Number of extensions or control panels: limited by hard disk space and memory
- Number of Apple Menu Items: 52 (More items can be added, but only the first 52 appear in the menu.)



THERE'S A LIMIT to the number of files that display in Open/Save dialog boxes, as well as the number of files contained in a folder.



FIND THE SHAREWARE and freeware programs mentioned on The Disc.

Easy Errors Easter Egg

In Dave Rubinic's freeware program **Easy Errors**, enter 69 in the Error Number field and press Return. **Easy Errors** reports a result code of **badPosition** and explains, "Your Mac has been caught in a compromising position." Thanks to reader Paolo Vidali for pointing this out.

Q I recently installed Mac OS 8, and now my Mac doesn't recognize the modem. I've fiddled with the PPP and TCP/IP control panels to no avail. How do I get my modem back?

A When you ran the Mac OS 8 installer, it apparently deleted some old telecommunications files from your hard drive, and that's preventing the Mac from correctly locating your modem. Insert the Mac OS 8 CD, double-click the CD Extras folder, then double-click the Apple Telecom folder. Run the installer that's appropriate for the type of modem you have, either Geoport/Express or serial. When the installer finishes, restart and then select the correct setup in the Modem control panel.

Q How does one change the default font in ClarisWorks 4.0 from the putrid Helvetica to, say, perhaps, Geneva?

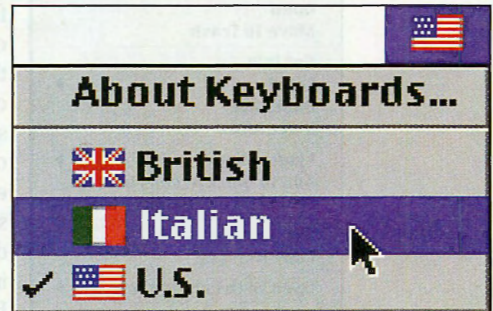
A I don't share your disdain for Helvetica, but I certainly understand your frustration at not being able to figure out how to accomplish what at first seems like a simple task. You can change the default font and other style information, but it's considerably harder than it should be. Begin by opening a new ClarisWorks word processing document. Type a few sample characters, select them all, then choose whatever you want from the Font, Size, and Style menus. You should see the effects of your choices immediately in the open document. When you are happy with your new defaults, press Delete to get rid of your sample text, leaving you with a blank document. Choose Save As from the File menu. Select the dog-eared stationery icon on the right, name the file ClarisWorks WP Options, and save it in the ClarisWorks Stationery folder. (If you performed a custom install, this folder may not be present, in which case you must create it manually and place it inside the same folder as the ClarisWorks application.) Quit and relaunch ClarisWorks. Your new defaults should be in effect.

Q My menu bar has a little American flag next to the Application menu. Clicking the flag reveals a menu of countries with their flags. Where did this menu come from, and what purpose does it serve?

A The menu with the flag icon is called the Keyboard menu. It used to be installed only in international versions of the System software, but under Mac OS 8, the Keyboard menu appears whenever more than one layout is selected in the Keyboard control panel. Keyboard layouts are small files that tell the Mac which characters are assigned to which keys on the keyboard; they are used primarily in countries in which two or more languages are used frequently. You can change layouts by choosing from the Keyboard menu, or you can rotate through the

installed keyboard layouts by pressing Command-Option-space bar, provided that this option is enabled in the Keyboard control panel (if you're not running Mac OS 8 and you inadvertently use this shortcut, you could change the layout without knowing it, because there's no Keyboard menu icon to alert you). If you choose Key Caps from the Apple menu, you can see in real-time how the different layouts change the key assignments.

If you never need to change layouts, unmark all the checkboxes in the Keyboard control panel. This makes the Keyboard menu disappear. Now quit all open applications, and double-click the System file. Drag unwanted keyboard layout files onto the desktop, then close the System file window. Even if you remove all the keyboard layout files, you'll still be able to type because the System file has a default layout that's appropriate for the language of the Mac OS you're using.



THE KEYBOARD MENU appears only if you have more than one layout selected in the Keyboard control panel.

Q After zapping PRAM by holding down Command-Option-P-R at startup, the little icon at the top of the Apple menu turned black. How do I get it back to its colorful little self?

A Open the Monitors & Sound control panel, and temporarily change the Color Depth setting.

Q In the first few issues of your magazine, when you opened the CD, there was a really cool large graphic composed of about 50 to 100 folder icons. What program takes a picture and puts all the icons in place, or are you just bored and do this by hand?

A What are you, crazy? No way we spend our precious time fiddling with icons by hand when there's a freeware utility called Iconizer from John McLaughlin that does this for us (<http://www.kagi.com/authors/johnm>).

Q I have a large hard drive that I've broken into two partitions. I like this configuration, except for one thing: When I drag a file from one partition to another, I want the original to move; I don't want to make a copy. Is there some way I can do this easily?

A Lots of people using partitions have the same conceptual problem. When you break a large drive into smaller partitions, each one shows up in the Finder as a separate volume. The Finder doesn't know that they are really parts of the same drive, and it doesn't care. It treats them as their own distinct volumes. As such, dragging a file from one partition to another is the same as dragging it to a floppy. This action initiates a copy, not a move.

The perfect solution for anyone working with multiple volumes would be an extension that allows you to Command-drag an item to tell

the Finder to move the file from one volume to another, not make a copy. I haven't found such a simple utility, but I did locate something that can do what you want and a whole lot more. Mark Aiken's PowerMenu is the definitive contextual menu utility. It allows you to open selected files with any application you specify; quickly open commonly used files or launch applications; and move, copy, or make an alias of selected files into folders of your choosing. This last feature is the one you want. First, set up target destinations by making aliases of your partitions and placing them in the PowerMenu Items folder in the Preferences folder. Then, whenever you want to move files from

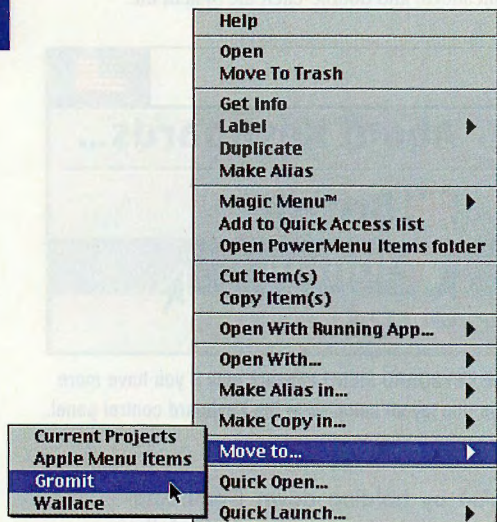
one location to another, Command-click the files. From the PowerMenu additions to the contextual menu, choose Move To, then specify the target folder or partition. PowerMenu copies the selected files and then deletes the originals, all in the blink of an eye. Best of all, this versatile shareware program works under System 7 as well as Mac OS 8. Find PowerMenu on The Disc, or download it (and tons of other useful contextual menu additions) from CM

Central, the premiere location for Mac OS 8 contextual plug-in news and information, at <http://www.interdesign.ca/cmcentral>. Also, be sure to check out Control-Click! at <http://venweb.com/controlclick>.

Q I keep reading about the superfast 16X, 20X, and so on CD-ROM drives. How can I tell what speed drive is in a Mac without consulting the manual (far too shameful an admission)? I run a Mac lab with 10 different species of Macs and want to know, at a glance, what speed CD-ROM drive each contains. Shouldn't this be included in the About This Macintosh window?

A There's no easy way to interrogate a CD-ROM drive with software to determine its multiplier because that information simply isn't in the drive's firmware. Even consulting the manual may not be a reliable way to go, as Apple has been known to sell Macs with drives that actually are faster than advertised, when slower drives were no longer available. One approach you could take is to run Apple System Profiler and choose Device Information from the Select menu. Locate and select the CD-ROM drive in the list of devices, and note the Vendor and Product ID listed on the right. Using this information, it should be possible to build a table that cross-references the known speed of the listed drives. Then you should adhere a sticker listing the speed on each Mac's case.

Owen W. Linzmayer (askus@macaddict.com, <http://www.netcom.com/~owenink>) is a San Francisco-based freelance writer and the author of *The Mac Bathroom Reader*. Please submit technical questions or helpful tips directly via email or c/o MacAddict, 150 North Hill Drive, Suite 40, Brisbane, CA 94005.



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Monday, July 15, 1996 (7:15 PM)
What's going on in the Mac world today? Here are some highlights for the Web-surfing Mac fan...

- Our debut issue is already appearing on newsstands, well in advance of the anticipated July 23 debut. Keep your eyes peeled for it in your mailbox or at your local newsstand, and send your comments to our letters department when you get your hands on it!
- Our multimedia enhancement option and our Epson PhotoPC contest are now online, as promised in the magazine. You'll need the CD-ROM that comes with MacAddict to enjoy the one and to enter the other.
- **RAM Doubler 2** is due to ship on August 7, amid the hurly-burly of Macworld Boston. Promised enhancements to Connectix Corp.'s RAM booster include memory tripling, faster compression and a control panel from which you can fine-tune its settings.

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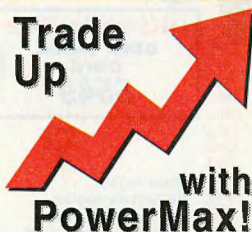


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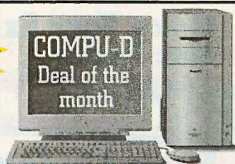
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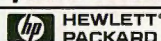
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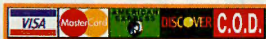


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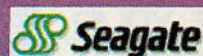
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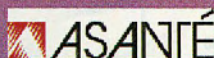
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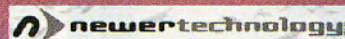
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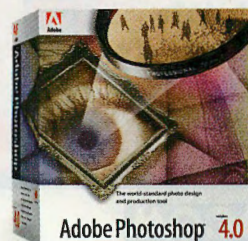
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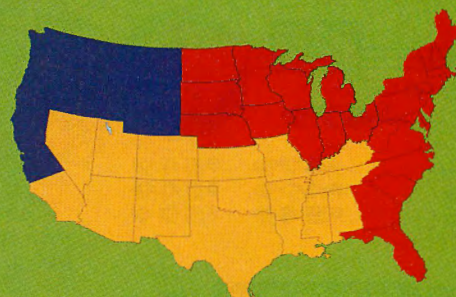
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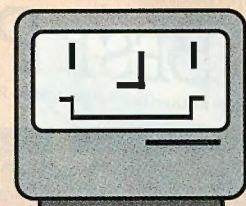
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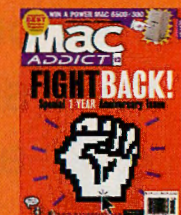
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Pondering MacAddicts

In search of "electronic discourse at the highest level," literary agent and author John Brockman invited a bunch of people he thinks are really smart to submit "the question you are asking yourself" to his Web site at <http://www.edge.org>. Although we're still not sure how the overhyped Esther Dyson got invited and we at MacAddict didn't, we decided to share what's currently on our minds anyway. Nyah. So, there.

Rob Capps: "I wonder if it's snowing outside."

Wade Albright: "Stress balls. What are they and why do people love them? Heh, heh, heh. He said balls."

Ken Bousquet: "Will I pay less for utilities now that there's global warming?"

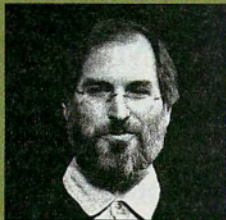
Mark Simmons: "Why do they put apes in a bestiary and bees in an apiary?"

Nikki Echler: "If it takes money to make money, how was it invented? And by whom? God?"

Kathy Tafel: "Why doesn't any building in the Bay Area have central heating?"

Photos by Ken Bousquet

Facial Scare



As good and evil merge, things start to get hairy. Will the real Steve please stand up?

WE WANT YOU! (PSYCHE!)

"JUST BECAUSE THEY HAVE MILLIONS AND BILLIONS OF DOLLARS DOESN'T MEAN THEY CAN CRAP ON THE LITTLE GUYS," SAID COMPUTER CONSULTANT AND APPLE CEO WANNABE MICHAEL MURDOCK IN RESPONSE TO PRANK EMAILS SENT OUT BY APPLE INTERIM CEO STEVE JOBS AND ORACLE CEO LARRY ELLISON TELLING HIM THAT HE GOT THE JOB. THE TWO JOKESTERS WERE LATER SPOTTED TOILET PAPERING MURDOCK'S HOUSE RIGHT AFTER SOAPING HIS CAR WINDOWS.

PC WEBMYSTRS, GET SERIOUS

"We don't show up in jeans and T-shirts, we show up in suits with briefcases," said Patrick McQuown, president of a Washington, D.C.-based Web-development firm, in a December *USA Today* article about the growing contingency of Webmasters who claim their title makes them seem "not as professional," "young," and "goofy." To further prove his point we took photos of our own very serious "HTML engineers" at work in their corporate environments.

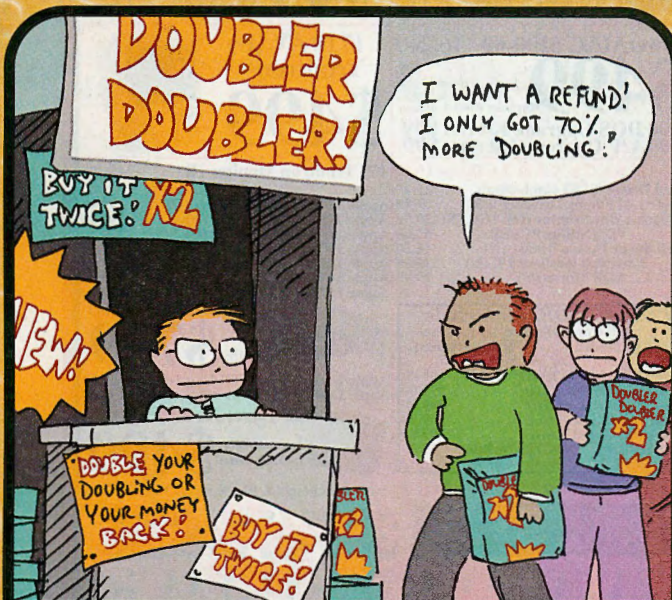


Sex, Drugs, and the Internet

"How are we going to protect our women after these guys get liquored up, look at pornography, and then roam the neighborhood late at night?" said a Fountain Valley, California, resident in a *Netly News* article last December on a protest against the opening of a gourmet food restaurant that offers a full bar and Internet access. Residents went on to complain about the destructive influences of rock 'n' roll, miniskirts, and Playboy bunnies.

Playboy Toy

"He is very active on it. He doesn't sit there and type things in. He has an assistant that accesses things for him. But he is very alert to what's going on not only on our site but on other sites as well."—Bill Farley, spokesman for *Playboy* founder Hugh Hefner on Hefner's love of the Internet. Analysts believe the *Playboy* site is one of the few Web sites that's actually profitable, thanks largely to the patrons of a new gourmet food restaurant in Fountain Valley, California.



THE BACKLASH AGAINST THE "ULTIMATE UTILITY" BEGINS

Doodle by Mark Simmons

Well, what'll it be?



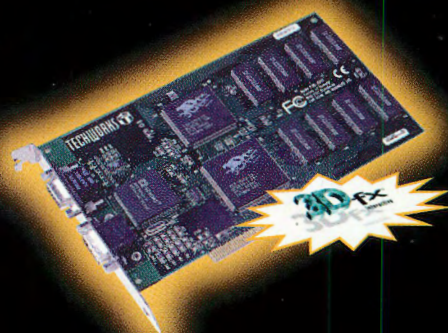
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Images above are actual screenshots from F/A-18 Hornet 3.0 Korea.

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